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PROPOSED MERGER
YOUR VOTE IS VERY IMPORTANT

To the Stockholders of Graphite Bio, Inc. and Lenz Therapeutics, Inc.,

Graphite Bio, Inc., a Delaware corporation ("Graphite"), and Lenz Therapeutics, Inc., a Delaware corporation ("LENZ"), entered into an Agreement and Plan of Merger (the "Merger Agreement") on November 14, 2023, pursuant to which, among other matters, Generate Merger Sub, Inc., a wholly-owned subsidiary of Graphite ("Merger Sub"), will merge with and into LENZ, with LENZ surviving the merger as the surviving corporation and a wholly-owned subsidiary of Graphite (such transaction, the "merger"). Upon the completion of the merger, Graphite will change its name to "LENZ Therapeutics, Inc." Graphite following the merger is referred to herein as the "combined company."

At the effective time of the merger (the "effective time"), (i) each then-outstanding share of LENZ's common stock, par value $0.001 per share ("LENZ common stock"), will be converted into the right to receive a number of shares of Graphite's common stock, par value $0.00001 per share ("Graphite common stock"), based on a ratio calculated in accordance with the Merger Agreement (the "exchange ratio") and (ii) each then-outstanding share of LENZ's preferred stock, par value $0.001 per share ("LENZ preferred stock" and together with the LENZ common stock, the "LENZ capital stock"), will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of shares of LENZ common stock into which such share of LENZ preferred stock is then convertible, as described in more detail in the section titled "*The Merger Agreement—Exchange Ratio*" beginning on page 204 of the accompanying proxy statement/prospectus. The final exchange ratio is subject to adjustment prior to closing of the merger (the "closing") based upon Graphite's net cash (as defined in the Merger Agreement) ("Graphite's net cash") at closing. Each share of Graphite common stock and each option to purchase Graphite common stock ("Graphite option") that is issued and outstanding at the effective time will remain issued and outstanding in accordance with its terms and such shares and options, subject to the proposed special cash dividend and reverse stock split, will be unaffected by the merger; provided that, each outstanding and unexercised Graphite option with a per share exercise price equal to or greater than $3.00 (prior to giving effect to the proposed special cash dividend and reverse stock split) (the "Out-of-the-Money Graphite Options") will be accelerated in full immediately prior to the effective time and each such Out-of-the-Money Graphite Option not exercised as of immediately prior to the effective time will be cancelled at the effective time for no consideration. All Graphite options with a per share exercise price of less than $3.00 (prior to giving effect to the proposed special cash dividend and reverse stock split) will continue to be subject to the same terms and conditions after the effective time as were applicable to such options as of immediately prior to the effective time.

In connection with the merger, each outstanding and unexercised option to purchase shares of LENZ common stock ("LENZ option") immediately prior to the effective time, whether or not vested, will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement, and each warrant to purchase shares of

LENZ common stock or LENZ preferred stock outstanding immediately prior to the effective time will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement.

In connection with the merger, Graphite concurrently entered into a subscription agreement (the "Subscription Agreement") with certain institutional investors (the "PIPE investors") pursuant to which, among other things, Graphite agreed to issue to the PIPE investors shares of Graphite common stock immediately following the merger in a private placement transaction for an aggregate purchase price of $53.5 million, which amount may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE investors (the "Graphite private placement").

Immediately after the consummation of the merger, based solely on the estimated exchange ratio as described in the accompanying proxy statement/prospectus, and after giving effect to the Graphite private placement, assuming a subscription amount of $53.5 million, Graphite securityholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ securityholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, in each case subject to adjustment of the exchange ratio as set forth in the Merger Agreement and excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP (each as defined in the accompanying proxy statement/prospectus). As of the date hereof, Graphite's management anticipates that Graphite's net cash at the closing will be between $115 million and $175 million, and, as further described below and in connection with the Merger Agreement, there would be no adjustment to the exchange ratio.

Shares of Graphite common stock are currently listed on The Nasdaq Stock Market LLC ("Nasdaq") under the symbol "GRPH". Graphite has filed an initial listing application for the combined company with Nasdaq. After completion of the merger, Graphite will be renamed "LENZ Therapeutics, Inc." and it is expected that the common stock of the combined company will trade on Nasdaq under the symbol "LENZ". It is a condition of the consummation of the merger that Graphite receive confirmation from Nasdaq that the combined company has been approved for listing on Nasdaq, but there can be no assurance such listing condition will be met or that Graphite will obtain such confirmation from Nasdaq. If such listing condition is not met or if such confirmation is not obtained, the merger will not be consummated unless the condition is waived. The Nasdaq condition set forth in the Merger Agreement is not expected to be waived by the applicable parties. On February 12, 2024, the last trading day before the date of the accompanying proxy statement/prospectus, the closing sale price of Graphite common stock as reported on Nasdaq was $2.97 per share.

The closing of the Graphite private placement is conditioned upon the satisfaction or waiver of the conditions to the closing of the merger and the substantially concurrent closing of the merger, as well as certain other conditions. The Graphite private placement is more fully described in the accompanying proxy statement/prospectus.

Graphite stockholders (the "Graphite stockholders") are cordially invited to attend the special meeting of Graphite's stockholders. Graphite is holding its special meeting (together with any adjournment or other delay thereof, the "Graphite special meeting") on March 14, 2024, at 9:00 AM Pacific Time, unless adjourned or postponed to a later date, in order to obtain the stockholder approvals necessary to complete the merger and related matters. The Graphite special meeting will be held entirely online. Graphite stockholders will be able to attend and participate in the Graphite special meeting online by visiting www.virtualshareholdermeeting.com/GRPH2024SM, where they will be able to listen to the meeting live, submit questions and vote. Graphite stockholders will need the 16-digit control number included with the Notice of Internet Availability of Proxy Materials being mailed to the Graphite stockholders separately in order to attend the Graphite special meeting. At the Graphite special meeting, Graphite will ask its stockholders to:

1. Approve (i) the issuance of shares of Graphite common stock, which will represent more than 20% of the shares of Graphite common stock outstanding immediately prior to the merger, to stockholders of

LENZ (the "LENZ stockholders"), pursuant to the terms of the Merger Agreement, a copy of which is attached as *Annex A* to the accompanying proxy statement/prospectus, and pursuant to Nasdaq Listing Rule 5635(a), (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite common stock to the PIPE investors pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding as of the date of the execution of the Subscription Agreement (the "Nasdaq Stock Issuance Proposal" or "Proposal No. 1");

2. Approve an amendment to Graphite's certificate of incorporation (the "Graphite charter") to (i) effect a reverse stock split of Graphite's issued common stock at a ratio in the range between 1:6 and 1:12, inclusive, with the final ratio and effectiveness of all other ratios of such amendment and the abandonment of such amendment to be mutually agreed by the board of directors of Graphite (the "Graphite board of directors") and the board of directors of LENZ (the "LENZ board of directors") prior to the effective time and (ii) change Graphite's name to "LENZ Therapeutics, Inc.", effective as of the effective time under the Merger Agreement, in the form attached as *Annex F* to the accompanying proxy statement/prospectus (the "Charter Amendment Proposal" or "Proposal No. 2");

3. Approve the 2024 Plan (as defined in the accompanying proxy statement/prospectus), which is the combined company's 2024 Equity Incentive Plan, in the form attached as *Annex G* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger (the "2024 Plan Proposal" or "Proposal No. 3");

4. Approve the 2024 ESPP (as defined in the accompanying proxy statement/prospectus), which is the combined company's 2024 Employee Stock Purchase Plan, in the form attached as *Annex H* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger (the "2024 ESPP Proposal" or "Proposal No. 4"); and

5. Approve an adjournment of the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal (the "Adjournment Proposal" or "Proposal No. 5").

Proposal Nos. 1, 2, 3, 4 and 5 are collectively referred to as the "Graphite Stockholder Proposals."

As described in the accompanying proxy statement/prospectus, certain Graphite stockholders who in the aggregate owned approximately 52% of the outstanding shares of capital stock of Graphite as of November 14, 2023, are parties to stockholder support agreements with Graphite and LENZ whereby such stockholders have agreed to vote all of their shares in favor of the Graphite Stockholder Proposals, and certain LENZ stockholders who in the aggregate owned approximately 70% of the outstanding shares of LENZ capital stock as of November 14, 2023, are parties to stockholder support agreements with Graphite and LENZ whereby such stockholders have agreed to vote all of their shares in favor of the adoption of the Merger Agreement and the approval of the merger and related transactions contemplated by the Merger Agreement, in each case subject to the terms of the support agreements. Following the effectiveness of the registration statement on Form S-4 of which the accompanying proxy statement/prospectus is a part and pursuant to the Merger Agreement, LENZ stockholders holding a sufficient number of shares of LENZ capital stock to adopt the Merger Agreement and approve the merger and related transactions will be asked to execute written consents providing for such adoption and approval.

Further, prior to the effective time, the Graphite board of directors will declare and set aside the aggregate cash amount to be paid in accordance with a special cash dividend (the "special cash dividend") to holders of record of outstanding shares of Graphite common stock as of a record date prior to the effective time of the merger, to be set by the Graphite board of directors as close as reasonably practicable to (but not later than) the anticipated closing. The ex-dividend date in respect of such special cash dividend will be determined by Nasdaq. Graphite stockholders of record who continue to hold their eligible shares of Graphite common stock until market open on the ex-dividend date will be entitled to payment of the special cash dividend. The aggregate

amount of the special cash dividend is expected to be $60.0 million, subject to certain adjustments depending on Graphite's net cash and the Graphite private placement.

After careful consideration, each of the Graphite and LENZ boards of directors have unanimously approved the Merger Agreement and have determined that it is advisable and in the best interests of their respective stockholders to consummate the merger. The Graphite board of directors has approved the proposals described in the accompanying proxy statement/prospectus and unanimously recommends that its stockholders vote "**FOR**" the proposals described in the accompanying proxy statement/prospectus.

More information about Graphite, LENZ, the Merger Agreement and transactions contemplated thereby and the foregoing proposals is contained in the accompanying proxy statement/prospectus. Graphite urges you to read the accompanying proxy statement/prospectus carefully and in its entirety. IN PARTICULAR, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DISCUSSED UNDER "RISK FACTORS" BEGINNING ON PAGE 26 OF THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS.

Graphite and LENZ are excited about the opportunities the merger brings to Graphite's and LENZ's stockholders and thank you for your consideration and continued support.

Kimberlee C. Drapkin
Interim President and Chief Executive Officer
Graphite Bio, Inc.

Evert Schimmelpennink
President and Chief Executive Officer
LENZ Therapeutics, Inc.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the accompanying proxy statement/prospectus. Any representation to the contrary is a criminal offense.

The accompanying proxy statement/prospectus is dated February 13, 2024 and is first being mailed to Graphite's stockholders on or about February 20, 2024.

GRAPHITE BIO, INC.
611 Gateway Blvd, Suite 120
South San Francisco, CA 94080

NOTICE OF SPECIAL MEETING

To the stockholders of Graphite Bio, Inc.:

NOTICE IS HEREBY GIVEN that the Graphite special meeting will be held on March 14, 2024 at 9:00 AM Pacific Time, unless adjourned to a later date. The Graphite special meeting will be held entirely online. You will be able to attend and participate in the Graphite special meeting online by visiting www.virtualshareholdermeeting.com/GRPH2024SM, where you will be able to listen to the meeting live, submit questions and vote. You will need the 16-digit control number included with the Notice of Internet Availability of Proxy Materials being mailed to you separately in order to attend the Graphite special meeting.

The Graphite special meeting will be held for the following purposes:

1. Approve (i) the issuance of shares of Graphite common stock, which will represent more than 20% of the shares of Graphite common stock outstanding immediately prior to the merger, to the LENZ stockholders, pursuant to the terms of the Merger Agreement, a copy of which is attached as *Annex A* to the accompanying proxy statement/prospectus, and pursuant to Nasdaq Listing Rule 5635(a), (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite common stock to the PIPE investors pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding as of the date of the execution of the Subscription Agreement;
2. Approve an amendment to Graphite's charter to (i) effect a reverse stock split of Graphite's issued common stock at a ratio in the range between 1:6 and 1:12, inclusive, with the final ratio and effectiveness of such amendment and the abandonment of all other ratios of such amendment to be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time and (ii) change Graphite's name to "LENZ Therapeutics, Inc.", effective as of the effective time under the Merger Agreement, in the form attached as *Annex F* to the accompanying proxy statement/prospectus;
3. Approve the 2024 Plan (as defined in the accompanying proxy statement/prospectus), which is the combined company's 2024 Equity Incentive Plan, in the form attached as *Annex G* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger;
4. Approve the 2024 ESPP (as defined in the accompanying proxy statement/prospectus), which is the combined company's 2024 Employee Stock Purchase Plan, in the form attached as *Annex H* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger; and
5. Approve an adjournment of the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal.

The Graphite board of directors has fixed January 29, 2024 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Graphite special meeting and any adjournment thereof. Only holders of record of shares of Graphite common stock at the close of business on the record date are entitled to notice of, and to vote at, the Graphite special meeting. At the close of business on the record date, Graphite had 58,230,156 shares of common stock outstanding and entitled to vote.

Your vote is important. The affirmative vote of a majority of the votes properly cast by the holders of Graphite common stock at the Graphite special meeting, assuming a quorum is present, is required for approval of Proposal Nos. 1, 2, 3, 4 and 5. Each of Proposal Nos. 2, 3 and 4 is conditioned upon the approval of Proposal No. 1. Approval of each of Proposal Nos. 1, 2, 3 and 4 is a condition to the completion of the merger.

Even if you plan to virtually attend the Graphite special meeting, Graphite requests that you sign and return the enclosed proxy or vote by mail or online to ensure that your shares will be represented at the Graphite special meeting if you are unable to virtually attend. You may change or revoke your proxy at any time before it is voted at the Graphite special meeting.

THE GRAPHITE BOARD OF DIRECTORS HAS UNANIMOUSLY DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS FAIR TO, IN THE BEST INTERESTS OF, AND ADVISABLE TO GRAPHITE AND THE GRAPHITE STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT GRAPHITE STOCKHOLDERS VOTE "FOR" EACH SUCH PROPOSAL.

Important Notice Regarding the Availability of Proxy Materials for the Graphite Special Meeting to Be Held on March 14, 2024 at 9:00 AM Pacific Time via the internet.

The proxy statement/prospectus and annual report to stockholders are available at *www.proxyvote.com*.

By Order of Graphite's Board of Directors,

Kimberlee C. Drapkin
Interim President and Chief Executive Officer

February 13, 2024

EXPLANATORY NOTE

The issuance of all shares of Graphite common stock in exchange for each share of LENZ common stock, as well as the issuance of all shares of Graphite common stock issuable upon the exercise of warrants to purchase LENZ capital stock being assumed in the merger, is intended to be covered by this registration statement on Form S-4 of which the accompanying proxy statement/prospectus is a part. The Graphite common stock that will be issued in the Graphite private placement will not be covered by this registration statement on Form S-4 of which the accompanying proxy statement/prospectus is a part, and will be subject to restrictions on resale until such shares are registered for resale.

REFERENCES TO ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about Graphite that is not included in or delivered with this document. You may obtain this information without charge through the Securities and Exchange Commission ("SEC") website (*www.sec.gov*) or upon your written or oral request by contacting 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080, Attention: Corporate Secretary, or by calling (650) 484-0886. Graphite also maintains a website at https://graphitebio.com/, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. However, the information contained in or accessible through Graphite's website is not part of this proxy statement/prospectus or the registration statement of which this proxy statement/prospectus forms a part.

To ensure timely delivery of these documents, please request as soon as possible to allow sufficient time to receive them before the Graphite special meeting.

For additional details about where you can find information about Graphite, please see the section titled "*Where You Can Find More Information*" beginning on page 432 of this proxy statement/prospectus.

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QUESTIONS AND ANSWERS ABOUT THE MERGER

Except where specifically noted, the following information and all other information contained in this proxy statement/prospectus does not give effect to the proposed reverse stock split described in Proposal No. 2 of this proxy statement/prospectus.

The following section provides answers to frequently asked questions about the merger. This section, however, provides only summary information. For a more complete response to these questions and for additional information, please refer to the cross-referenced sections.

Q: What is the merger?

A: On November 14, 2023, Graphite, LENZ and Merger Sub entered into the Merger Agreement, a copy of which is attached as *Annex A*. The Merger Agreement contains the terms and conditions of the proposed merger. Pursuant to the Merger Agreement, Merger Sub will merge with and into LENZ, with LENZ surviving as a wholly-owned subsidiary of Graphite. This transaction is referred to in this proxy statement/prospectus as the "merger." At the effective time, Graphite will change its name to "LENZ Therapeutics, Inc." The surviving corporation following the merger is referred to as the "combined company."

At the effective time, (a) each then-outstanding share of LENZ common stock (excluding shares held as treasury stock and automatically cancelled pursuant to the Merger Agreement and excluding dissenting shares, but including any awards of restricted shares of LENZ common stock that are unvested and outstanding immediately prior to the effective time (the "LENZ restricted shares")) will be converted into the right to receive a number of shares of Graphite common stock, based on the exchange ratio described in more detail in the section titled "*The Merger Agreement—Exchange Ratio*" beginning on page 204 of this proxy statement/prospectus, (b) each then-outstanding share of LENZ preferred stock will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of LENZ common stock into which each share of LENZ preferred stock is then convertible, (c) each then-outstanding LENZ option will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement and (d) each then-outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement.

Under the terms of the Merger Agreement, each share of Graphite common stock issued and outstanding at the time of the merger will remain issued and outstanding, and, subject to the proposed reverse stock split and any acceleration provided for in connection with the merger, will be unaffected by the merger. In addition, each then unexercised and outstanding Out-of-the-Money Graphite Option will accelerate in full as of immediately prior to the effective time and each such stock option not exercised as of immediately prior to the effective time will be cancelled at the effective time for no consideration. All Graphite options with an exercise price per share of less than $3.00 will continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite option as of immediately prior to the effective time.

Upon the closing, on a pro forma basis and based upon the number of shares of Graphite common stock expected to be issued in the merger, pre-merger Graphite stockholders will own approximately 35% of the combined company and pre-merger LENZ stockholders will own approximately 65% of the combined company on a fully-diluted basis (prior to giving effect to the Graphite private placement and excluding shares reserved for future grants under the 2024 Plan and the 2024 ESPP, as each is defined in the section titled "*Proposal No. 3—The 2024 Plan Proposal*" and "*Proposal No. 4—The 2024 ESPP Proposal*," respectively, beginning on pages 265 and 275, respectively, of this proxy statement/prospectus). Following the consummation of the Graphite private placement, assuming a subscription amount of $53.5 million, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital

stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP). The exchange ratio, and related pro forma ownership, will be adjusted (i) to account for the effect of the proposed reverse stock split and (ii) to the extent that Graphite's net cash immediately prior to the closing is less than $115 million (and as a result, Graphite stockholders could own more or less of the combined company).

Q: Why are the two companies proposing to merge?

A: Graphite and LENZ believe that combining the two companies will result in a combined company with a strong leadership team and substantial capital resources to pursue LENZ's goal to develop and commercialize a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday. For a more complete description of the reasons for the merger, please see the sections titled "*The Merger—Graphite's Reasons for the Merger*" and "*The Merger—LENZ's Reasons for the Merger*" beginning on pages 159 and 162, respectively, of this proxy statement/prospectus.

Q: What are the combined company's plans with respect to Graphite's legacy assets?

A: The combined company shall continue to hold, maintain and preserve Graphite's legacy assets related to nula-cel and related preclinical platform subject to Graphite's license and option agreement ("LOA") with Kamau Therapeutics, Inc. ("Kamau") unless the option is exercised before closing. Further, if Kamau's option terminates without exercise, the combined company may explore other strategic partners to acquire such Graphite legacy assets or otherwise monetize such assets.

Q: What will happen to Graphite if, for any reason, the merger with LENZ does not close?

A: Graphite has invested significant time and incurred, and expects to continue to incur, significant expenses related to the proposed merger with LENZ. In the event the merger does not close, the Graphite private placement will also not close, as the closing of the Graphite private placement is expected to occur concurrently with, and is conditioned upon, the closing, and Graphite will have a limited ability to continue its current operations without obtaining additional financing. Although the Graphite board of directors may elect, among other things, to attempt to complete another strategic transaction if the merger with LENZ does not close, the Graphite board of directors may instead divest all or a portion of Graphite's business or take steps necessary to liquidate or dissolve Graphite's business and assets if a viable alternative strategic transaction is not available. If Graphite decides to dissolve and liquidate its assets, Graphite would be required to pay all of its contractual obligations, and to set aside certain reserves for potential future claims, and there can be no assurance as to the amount of and the timing of such liquidation and distribution of available cash left to distribute to stockholders after paying the obligations of Graphite and setting aside funds for reserves.

Q: Why am I receiving this proxy statement/prospectus?

A: You are receiving this proxy statement/prospectus because you have been identified as a stockholder of Graphite and/or LENZ as of the applicable record date. This document serves as:

- a proxy statement of Graphite used to solicit proxies for the Graphite special meeting to vote on the matters set forth herein; and
- a prospectus of Graphite used to offer shares of Graphite common stock in exchange for shares of LENZ capital stock in the merger.

Q: What is the Graphite private placement?

A: On November 14, 2023, Graphite entered into the Subscription Agreement with the PIPE investors. Pursuant to the Subscription Agreement, Graphite agreed to sell shares of Graphite common stock for an aggregate purchase price of approximately $53.5 million in the Graphite private placement.

The closing of the Graphite private placement is expected to occur concurrently with, and is conditioned upon, the closing. Following the consummation of the Graphite private placement, assuming a subscription amount of $53.5 million, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP).

At the closing of the Graphite private placement, in connection with the Subscription Agreement, Graphite intends to enter into a registration rights agreement (the "Registration Rights Agreement") with the PIPE investors. Pursuant to the Registration Rights Agreement, Graphite will prepare and file a resale registration statement with the SEC within 10 calendar days following the closing of the Graphite private placement. Graphite will use commercially reasonable efforts to cause this registration statement to be declared effective by the SEC within 60 days of the closing of the Graphite private placement (or within 90 calendar days if the SEC reviews the registration statement), or by such other deadline as provided in the Registration Rights Agreement.

Q: What proposals will be voted on at the Graphite special meeting in connection with the merger?

A: Pursuant to the terms of the Merger Agreement, the following proposals must be approved by the majority of votes cast at the Graphite special meeting in order for the merger to close:

- **Proposal 1—The Nasdaq Stock Issuance Proposal** to approve (i) the issuance of shares of Graphite common stock, which represent more than 20% of the shares of Graphite common stock outstanding immediately prior to the merger, to LENZ stockholders pursuant to the terms of the Merger Agreement and pursuant to Nasdaq Listing Rule 5635(a), (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite common stock to the PIPE investors pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding as of the date of the execution of the Subscription Agreement.
- **Proposal 2—The Charter Amendment Proposal** to approve an amendment to the Graphite charter to (i) effect a reverse stock split of Graphite's issued common stock at a ratio in the range between 1:6 and 1:12, inclusive, with the final ratio and effectiveness of such amendment and the abandonment of all other ratios of such amendment to be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time, and (ii) change Graphite's name to "LENZ Therapeutics, Inc.", effective as of the effective time under the Merger Agreement, in the form attached as *Annex F* to the accompanying proxy statement/prospectus.

Each of Proposal Nos. 1 and 2 is a condition to the completion of the merger. The issuance of Graphite common stock in connection with the merger and the change of control of Graphite resulting from the merger will not take place unless Proposal No. 1 is approved by the majority of the votes cast and the merger is consummated. The amendment to the Graphite charter to effect a reverse stock split of Graphite's issued common stock will not take place unless Proposal No. 2 is approved by the majority of the votes cast.

In addition to the requirement of obtaining the approval of the majority of the votes cast of Proposal Nos. 1 and 2, the closing of the merger is subject to the satisfaction or waiver of each of the closing conditions set forth in the Merger Agreement. For a more complete description of the closing conditions under the Merger Agreement, please see the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" beginning on page 218 of this proxy statement/prospectus.

The presence, by accessing online or being represented by proxy, at the Graphite special meeting of the holders of a majority of the shares of Graphite common stock outstanding and entitled to vote at the Graphite special meeting is necessary to constitute a quorum at the meeting for the approval of the Nasdaq Stock Issuance Proposal, the Charter Amendment Proposal, the 2024 Plan Proposal and the ESPP Proposal.

Q: What proposals are to be voted on at the Graphite special meeting, other than the Nasdaq Stock Issuance Proposal and the Reverse Stock Split Proposal?

A: At the Graphite special meeting, the holders of Graphite common stock will also be asked to consider the following proposals:

- **Proposal 3—The 2024 Plan Proposal** to approve the 2024 Plan, which is the combined company's 2024 Equity Incentive Plan, in the form attached as *Annex G* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger.
- **Proposal 4—The 2024 ESPP Proposal** to approve the 2024 ESPP, which is the combined company's 2024 Employee Stock Purchase Plan, in the form attached as *Annex H* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger.
- **Proposal 5—The Adjournment Proposal** to approve an adjournment of the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal.

Each of Proposal Nos. 3 and 4 are conditions to the completion of the merger. Graphite does not expect that any matter other than the Graphite Stockholder Proposals will be brought before the Graphite special meeting.

The presence, by accessing online or being represented by proxy, at the Graphite special meeting of the holders of the majority of the shares of Graphite common stock outstanding and entitled to vote at the Graphite special meeting is necessary to constitute a quorum at the meeting for the purpose of approving the Graphite Stockholder Proposals.

Q: What stockholder votes are required to approve the Graphite Stockholder Proposals at the Graphite special meeting?

A: The affirmative vote of a majority of the votes cast for and against by the holders of Graphite common stock at the Graphite special meeting, assuming a quorum is present, is required for approval of each of the Graphite Stockholder Proposals. Each of Proposal Nos. 2, 3 and 4 is conditioned upon the approval of Proposal No. 1.

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "FOR" and "AGAINST" votes, abstentions and broker non-votes, as applicable to each approval. Abstentions and broker non-votes will also be treated as shares present for the purpose of determining the presence of a quorum for the transaction of business at the Graphite special meeting. For Proposal Nos. 1, 2, 3, 4 and 5, abstentions and broker non-votes are not counted as votes cast and will have no effect on the outcome of the vote.

Q: Why is Graphite seeking stockholder approval to issue shares of Graphite common stock to existing stockholders of LENZ in the merger?

A: Because the Graphite common stock is listed on Nasdaq, Graphite is subject to the Nasdaq rules. Rule 5635(a) of the Nasdaq rules requires stockholder approval with respect to the issuance of Graphite common stock, among other instances, (i) when the shares to be issued are being issued in connection with the acquisition of the stock or assets of another company and are equal to 20% or more of the outstanding shares of Graphite common stock before the issuance and (ii) when any director, officer or "Substantial Shareholder" (as defined by Nasdaq Listing Rule 5635(e)(3)) of such company has a 5% or greater interest, directly or indirectly, in the company to be acquired or in the consideration to be paid in the transaction and the issuance of common stock could result in an increase in outstanding common shares or voting power of 5% or more. Rule 5635(b) of the Nasdaq rules also requires stockholder approval when any issuance or potential issuance will result in a "change of control" of the issuer. Although Nasdaq has not adopted any rule on what constitutes a "change of control" for purposes of Rule 5635(b), Nasdaq has previously indicated that the acquisition of, or right to acquire, by a single investor or affiliated investor group, as little as 20% of the common stock (or securities convertible into or exercisable for common stock) or voting

power of an issuer could constitute a change of control. Rule 5635(d) of the Nasdaq rules also requires stockholder approval for a transaction other than a public offering involving the sale, issuance or potential issuance by an issuer of common equity securities (or securities convertible into or exercisable for common equity securities) at a price that is less than market value of the stock if the number of equity securities to be issued is or may be equal to 20% or more of the common equity securities, or 20% or more of the voting power, outstanding before the issuance.

In the case of the merger, Graphite expects to issue approximately 107,720,000 shares of Graphite common stock on a fully diluted basis, and Graphite common stock to be issued pursuant to the Merger Agreement will represent greater than 20% of its voting stock. In addition, entities affiliated with Versant Ventures beneficially own approximately 28.3% of the outstanding shares of Graphite common stock prior to the merger and approximately 17.0% of the outstanding shares of LENZ capital stock prior to the merger, and representatives of Versant Ventures serve on the board of directors of each of pre-merger Graphite and pre-merger LENZ. In the case of the Graphite private placement, Graphite expects to issue approximately 24,883,552 shares of Graphite common stock on a fully diluted basis, and the Graphite common stock to be issued pursuant to the Subscription Agreement will represent greater than 20% of Graphite's voting stock. Accordingly, Graphite is seeking stockholder approval of the issuance pursuant to the Merger Agreement and the issuance pursuant to the Subscription Agreement under the Nasdaq rules.

Q: What will Graphite stockholders receive in the merger?

A: Graphite stockholders will continue to own and hold their existing shares of Graphite common stock issued and outstanding at the time of the merger and such shares will remain issued and outstanding, and, subject to the proposed reverse stock split and any acceleration provided for in connection with the merger, will be unaffected by the merger. In addition, each unexercised and outstanding Out-of-the-Money Graphite Option, will accelerate in full as of immediately prior to the effective time and each such stock option not exercised as of immediately prior to the effective time will be cancelled at the effective time for no consideration. All Graphite options with an exercise price per share of less than $3.00 will continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite options as of immediately prior to the effective time.

Additionally, prior to the closing, Graphite will declare, and set aside the aggregate cash amount to be paid in accordance with, a special cash dividend to holders of record of outstanding shares of Graphite common stock as of a record date prior to the effective time, to be determined by the Graphite board of directors. The ex-dividend date in respect of such special cash dividend date will be determined by Nasdaq. The Graphite stockholders of record who continue to hold their eligible shares of Graphite common stock until market open on the ex-dividend date will be entitled to payment of the special cash dividend.

For a more complete description of the treatment of Graphite securities in the merger, please see the sections titled "*The Merger Agreement—Merger Consideration,*" "*The Merger Agreement—Exchange Ratio,*" and "*Market Price and Dividend Information*" beginning on pages 203, 204 and 25, respectively, of this proxy statement/prospectus. For a description of the effect of the Graphite private placement on Graphite's current stockholders, please see the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 of this proxy statement/prospectus.

Q: What will LENZ securityholders receive in the merger?

A: LENZ stockholders will receive shares of Graphite common stock, LENZ optionholders' outstanding and unexercised LENZ options will be assumed by Graphite and will be converted into Graphite options, with appropriate adjustments to reflect the exchange ratio, as determined in accordance with the Merger Agreement, and each outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, with appropriate adjustments to reflect the exchange ratio, as determined in accordance with the Merger Agreement. Immediately after the merger, on a pro forma basis and based upon the number of shares of Graphite

common stock expected to be issued in the merger, pre-merger Graphite stockholders will own approximately 35% of the combined company on a fully diluted basis and pre-merger LENZ stockholders will own approximately 65% of the combined company on a fully-diluted basis (prior to giving effect to the Graphite private placement and excluding shares reserved for future grants under the 2024 Plan and the 2024 ESPP). Following the consummation of the Graphite private placement, assuming a subscription amount of $53.5 million, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP). The exchange ratio, and related pro forma ownership, will be adjusted (i) to account for the effect of the proposed reverse stock split and (ii) to the extent that Graphite's net cash immediately prior to the closing is less than $115 million (and as a result, Graphite stockholders could own more or less of the combined company).

For a more complete description of the treatment of LENZ common stock and LENZ options in the merger, please see the sections titled "*The Merger Agreement—Merger Consideration*" and "*The Merger Agreement—Exchange Ratio*" beginning on pages 203 and 204, respectively of this proxy statement/prospectus. For a description of the effect of the Graphite private placement on LENZ's current securityholders, please see the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 of this proxy statement/prospectus.

Q: What is the reverse stock split and why is it necessary?

A: Subject to the approval of the Charter Amendment Proposal, concurrently with the effective time, by virtue of filing the amendment to the Graphite charter in the form attached hereto as *Annex F* and incorporated herein by reference, the outstanding shares of Graphite common stock will be combined into a lesser number of shares, at a reverse split ratio to be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time and publicly announced by Graphite and identified in the amendment to the Graphite charter so filed. Upon the effectiveness of such amendment to effect the reverse stock split (the "reverse stock split effective time"), the issued shares of Graphite common stock immediately prior to the reverse stock split effective time will automatically without further action on the part of Graphite be combined into a smaller number of shares such that a Graphite stockholder will own one new share of Graphite common stock for every six to twelve shares of issued Graphite common stock held by such stockholder immediately prior to the reverse stock split effective time.

The Graphite board of directors believes that a reverse stock split may be desirable for a number of reasons. Graphite common stock is currently, and is expected to continue to be following the completion of the merger, listed on Nasdaq. According to the applicable Nasdaq rules, in order for Graphite common stock to continue to be listed on Nasdaq, Graphite must satisfy certain requirements established by Nasdaq. The Graphite board of directors expects that a reverse stock split of Graphite common stock will increase the market price of Graphite common stock so that Graphite will be able to maintain compliance with the relevant Nasdaq listing requirements for the foreseeable future, although Graphite cannot assure holders of Graphite common stock that it will be able to do so. The Graphite board of directors also believes a higher stock price may help generate investor interest in the combined company, help the combined company attract and retain employees, increase trading volume in the combined company's common stock, and facilitate future financings by the combined company.

Please see the discussion in the section titled "*Proposal No. 2—The Charter Amendment Proposal*" beginning on page 257 of this proxy statement/prospectus for additional details regarding and reasons for the proposed reverse stock split.

Q: Will the common stock of the combined company trade on an exchange?

A: Shares of Graphite common stock are currently listed on Nasdaq under the symbol "GRPH." Graphite has filed an initial listing application for the common stock of the combined company with Nasdaq. At the effective time, Graphite will be renamed "LENZ Therapeutics, Inc." and it is expected that the common stock of the combined company will trade on Nasdaq under the symbol "LENZ". It is a condition of the consummation of the merger that Graphite receive confirmation from Nasdaq that the combined company has been approved for listing on Nasdaq, but there can be no assurance such listing condition will be met or that Graphite will obtain such confirmation from Nasdaq. If such listing condition is not met or if such confirmation is not obtained, the merger will not be consummated unless the condition is waived. The Nasdaq condition set forth in the Merger Agreement is not expected to be waived by the applicable parties. For a description of the effect of a waiver of the Nasdaq listing closing condition, please see the section titled "*Risk Factors—Risks Related to the Combined Company*" beginning on page 112 of this proxy statement/prospectus.

On February 12, 2024 the last trading day before the date of this proxy statement/prospectus, the closing sale price of Graphite common stock was $2.97 per share.

Q: Who will be the directors of the combined company following the merger?

A: Immediately following the merger, the combined company's board of directors will be composed of seven members, consisting of two members designated by Graphite and five members designated by LENZ. The staggered structure of the Graphite board of directors will remain in place for the combined company following the completion of the merger. All of Graphite's current directors, other than Kimberlee C. Drapkin, are expected to resign from their positions as directors of Graphite, effective as of the effective time.

Q: Who will be the executive officers of the combined company immediately following the merger?

A: Immediately following the merger, the executive management team of the combined company is expected to consist of the following members of the LENZ executive management team prior to the merger:

Name	Title
Evert Schimmelpennink	President, Chief Executive Officer and Secretary
Shawn Olsson	Chief Commercial Officer
Marc Odrich	Chief Medical Officer

Q: As a Graphite stockholder, how does the Graphite board of directors recommend that I vote?

A: After careful consideration, the Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" all of the Graphite Stockholder Proposals.

Q: What risks should I consider in deciding whether to vote in favor of the merger?

A: You should carefully review the section titled "*Risk Factors*" beginning on page 26 of this proxy statement/prospectus and the documents incorporated by reference herein, which set forth certain risks and uncertainties related to the merger, risks and uncertainties to which the combined company's business will be subject, and risks and uncertainties to which each of Graphite and LENZ, as independent companies, are subject.

Q: When do you expect the merger to be consummated?

A: The merger is anticipated to close in the first quarter of 2024, but the exact timing cannot be predicted. For more information, please see the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" beginning on page 218 of this proxy statement/prospectus.

Q: What do I need to do now?

A: Graphite urges you to read this proxy statement/prospectus carefully, including the annexes and the documents incorporated by reference, and to consider how the merger affects you.

If you are a Graphite stockholder of record, you may provide your proxy instruction in one of four different ways:

- By Internet. You may vote at www.virtualshareholdermeeting.com/GRPH2024SM. 24 hours a day, seven days a week. Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the meeting date. You will need the control number included on your proxy card.
- During the Graphite special meeting. You may vote during Graphite special meeting by going to www.virtualshareholdermeeting.com/GRPH2024SM. You will need the control number included on your proxy card.
- By Telephone: You may vote using a touch-tone telephone by calling 1-800-690-6903, 24 hours a day, seven days a week. Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the meeting date. You will need the control number included on your proxy card.
- By Mail. You may vote by completing and mailing your proxy card. Mark, sign and date your proxy card and return it in the postage-paid envelope provided or return to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717. To vote by mail, please allow sufficient time for delivery for your vote to be counted.

Even if you plan to participate in the virtual Graphite special meeting, it is recommended that you also vote by proxy so that your vote will be counted if you later decide not to participate in the Graphite special meeting.

If you hold your shares in "street name" (as described below), will receive voting instructions from your broker, bank or other nominee. You must follow the voting instructions provided by your broker, bank or other nominee on how to vote your shares. Stockholders holding their shares in "street name" should generally be able to vote by returning an instruction card, or by telephone or on the Internet. However, the availability of telephone and Internet voting will depend on the voting process of your broker, bank or other nominee. If you hold your shares in "street name," you may not vote your shares on your own behalf at the Graphite special meeting unless you obtain a legal proxy from your broker, bank or other nominee. Please provide your proxy instructions only once, unless you are revoking a previously delivered proxy instruction, and as soon as possible so that your shares can be voted at the Graphite special meeting.

Q: What happens if I do not return a proxy card or otherwise vote or provide proxy instructions, as applicable?

A: If you are a Graphite stockholder, the failure to return your proxy card or otherwise vote or provide proxy instructions will reduce the aggregate number of votes required to approve Proposal Nos. 1, 2, 3, 4 and 5.

Q: May I attend the Graphite special meeting and vote in person?

A: Stockholders of record as of January 29, 2024, will be able to attend and participate in the Graphite special meeting online by accessing www.virtualshareholdermeeting.com/GRPH2024SM. There will be no physical location for stockholders to attend. To join the Graphite special meeting and vote online, you will need to have your 16-digit control number which is included on your proxy card or on the instructions that accompanied your proxy materials. The control number is designed to verify your identity and allow you to vote your shares of Graphite common stock at the Graphite special meeting or to vote by proxy prior to the Graphite special meeting. If you attend the Graphite special meeting and vote via the Internet, your vote will revoke any proxy that you have previously submitted.

If your shares are held in "street name," you should contact your bank, broker or other nominee if you did not receive a control number. If your shares are held in "street name" you will also need to provide a legal proxy to vote during the meeting.

Please note that even if you plan to attend the Graphite special meeting, it is recommended that you vote in advance to ensure that your shares will be represented.

Q: Who counts the votes?

A: Votes will be counted by the inspector of elections appointed for the Graphite special meeting. If you are a stockholder of record, your executed proxy card is returned directly to such inspector of elections for tabulation. If you hold your shares through a broker, your broker returns one proxy card to the inspector of elections on behalf of all its clients.

Q: If my Graphite shares are held in "street name" by my broker, will my broker vote my shares for me?

A: If you hold shares beneficially in street name and do not provide your broker or other agent with voting instructions, your shares may constitute a "broker non-vote." A "broker non-vote" occurs when shares held by a broker are not voted with respect to a particular proposal because the broker does not have or did not exercise discretionary authority to vote in the matter and has not received voting instructions from its clients. These matters are referred to as "non-routine" matters. Each of Proposals Nos. 1, 2, 3, 4 and 5 are considered "non-routine" matters, and thus a Graphite stockholder's broker, bank or other agent may not vote your shares on these proposals in the absence of such holders' voting instructions. Accordingly, if you hold your shares beneficially in street name please be sure to instruct your broker or other agent how to vote to ensure that your vote is counted on each of the proposals.

Q: What are broker non-votes and do they count for determining a quorum?

A: Generally, a "broker non-vote" occurs when shares held by a broker are not voted with respect to a particular proposal because the broker does not have or did not exercise discretionary authority to vote on the matter and has not received voting instructions from its client.

Broker non-votes will be treated as shares present for the purpose of determining the presence of a quorum for the transaction of business at the Graphite special meeting. Broker non-votes will not be counted as "votes cast" and will therefore have no effect on Proposal Nos. 1, 2, 3, 4 and 5. None of the proposals currently scheduled to be voted on at the Graphite special meeting are "routine" matters for which brokers have discretionary authority to vote. Accordingly, it is not expected that there will be any broker non-votes.

Q: May I change my vote after I have submitted a proxy or provided proxy instruction?

A: Graphite stockholders of record, unless such stockholder's vote is subject to a support agreement, may change their vote at any time before their proxy is voted at the Graphite special meeting in one (1) of four (4) ways:

- You may submit another properly completed proxy with a later date by mail or via the internet.
- You can provide your proxy instructions via telephone at a later date.
- You may send a notice that you are revoking your proxy over the internet, following the instructions provided on the proxy card.
- You may attend the Graphite special meeting online. Upon entry of your 16-digit control number which is included on your proxy card or on the instructions that accompanied your proxy materials. The control number is designed to verify your identity and allow you to vote your shares of Graphite common stock at the Graphite special meeting or to vote by proxy prior to the Graphite special meeting. If you attend the Graphite special meeting and vote via the Internet, your vote will revoke any proxy that you have previously submitted. Simply attending the Graphite special meeting will not, by itself, revoke your proxy.

If a Graphite stockholder who owns shares of Graphite common stock in "street name" has instructed a broker to vote its shares of Graphite common stock, the stockholder must follow directions received from its broker to change those instructions.

Q: Have any of Graphite's stockholders agreed to vote in favor of the issuance of the shares in the merger?

A: Yes. In connection with the execution of the Merger Agreement, holders of approximately 51% of the outstanding shares of Graphite common stock have entered into support agreements, as further described in the section titled "*Agreements Related to the Merger*" beginning on page 224 of this proxy statement/prospectus, with Graphite and LENZ that provide, among other things, that the stockholders subject to these agreements will vote in favor of the issuance of shares of Graphite common stock in the merger, subject to the terms of the support agreements.

Q: Who is paying for this proxy solicitation?

A: Graphite is paying for the cost of printing and filing of this proxy statement/prospectus and the proxy card. Arrangements will also be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of Graphite common stock for the forwarding of solicitation materials to the beneficial owners of Graphite common stock. Graphite will reimburse these brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials. Graphite has retained Mackenzie Partners, Inc. ("Mackenzie") to assist it in soliciting proxies using the means referred to above. Graphite will pay the fees of Mackenzie which Graphite expects to be approximately $8,500, plus reimbursement of out-of-pocket expenses.

Q: What are the material U.S. federal income tax consequences of the merger to holders of Graphite common stock?

A: Graphite stockholders will not sell, exchange or dispose of any shares of Graphite common stock as a result of the merger. Thus, there will be no material U.S. federal income tax consequences to Graphite stockholders as a result of the merger.

Q: What are the material U.S. federal income tax consequences of the merger to United States holders of LENZ capital stock?

A: Subject to the limitations and qualifications described in the section titled "*The Merger—Material U.S. Federal Income Tax Consequences of the Merger*," in the opinion of Wilson Sonsini Goodrich & Rosati, P.C., ("Wilson Sonsini"), the merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code") and holders of LENZ capital stock will not recognize gain or loss for U.S. federal income tax purposes upon the receipt of shares of Graphite common stock in exchange for LENZ capital stock in the merger. For a more detailed discussion of the material U.S. federal income tax consequences of the merger, see "*The Merger—Material U.S. Federal Income Tax Considerations—Material U.S. Federal Income Tax Consequences of the Merger*" beginning on page 192 of this proxy statement/prospectus.

Q: What are the material U.S. federal income tax consequences of the special cash dividend that Graphite will declare and pay to holders of Graphite common stock?

A: The U.S. federal income tax consequences of a holder's receipt of the special cash dividend generally should be treated first as a dividend to the extent of Graphite's current and accumulated earnings and profits, then as a non-taxable return of capital to the extent of the holder's basis in Graphite common stock, and then as capital gain from the sale or exchange of Graphite common stock with respect to any remaining amount.

Graphite currently has an accumulated deficit and expects additional losses in the current period. Thus, Graphite expects most or all of the distribution of the special cash dividend to be treated as other than a dividend for U.S. federal income tax purposes. However, there can be no assurance that it will be so treated. Please review the information in the section titled "*The Merger—Material U.S. Federal Income Tax Considerations—Material U.S. Federal Income Tax Consequences of the Special Cash Dividend to Holders of Graphite Common Stock*" beginning on page 194 of this proxy statement/prospectus for a discussion of the material U.S. federal income tax consequences of the special cash dividend to holders of Graphite common stock.

Q: What are the material U.S. federal income tax consequences of the reverse stock split to holders of Graphite common stock?

A: A holder of Graphite common stock should not recognize gain or loss upon the reverse stock split, except to the extent such holder receives cash in lieu of a fractional share of Graphite common stock, and subject to the discussion in the section titled "*Proposal No. 2—The Charter Amendment Proposal*" beginning on page 257 of this proxy statement/prospectus. Please review the information in the section titled "*Proposal No. 2—The Charter Amendment Proposal—Material U.S. Federal Income Tax Consequences of the Reverse Stock Split*" beginning on page 261 of this proxy statement/prospectus for a more complete description of the material U.S. federal income tax consequences of the reverse stock split to holders of Graphite common stock.

Q: Who can help answer my questions?

A: If you are a Graphite stockholder and would like additional copies of this proxy statement/prospectus without charge or if you have questions about the merger or related matters, including the procedures for voting your shares, you should contact:

Mackenzie Partners, Inc.
1407 Broadway, 27th Floor
New York, New York 10018
(212) 929-5500
(800) 322-2885
Email: proxy@mackenziepartners.com

PROSPECTUS SUMMARY

This summary highlights selected information from this proxy statement/prospectus and may not contain all of the information that is important to you. To better understand the merger and the proposals being considered at the Graphite special meeting, you should read this entire proxy statement/prospectus carefully, including the Merger Agreement and the other annexes to which you are referred in this proxy statement/prospectus, and the documents incorporated by reference herein. For more information, please see the section titled "*Where You Can Find More Information*" beginning on page 432 of this proxy statement/prospectus. Except where specifically noted, the following information and all other information contained in this proxy statement/prospectus does not give effect to the proposed reverse stock split described in Proposal No. 2 of this proxy statement/prospectus.

The Companies

Graphite

Graphite has historically been a clinical-stage, next-generation gene editing company. In January 2023, Graphite announced a voluntary pause of its Phase 1/2 CEDAR study of nulabeglogene autogedtemcel (nula-cel), for sickle cell disease ("SCD") due to a serious adverse event in the first patient dosed, which Graphite concluded is likely related to study treatment. Nula-cel was being developed as a highly differentiated approach to treating SCD, with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

In February 2023, Graphite announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives. As a result of this decision, Graphite announced a corporate restructuring that resulted in an approximately 71.2% reduction in its workforce. In February 2023, Graphite also disclosed its intention to continue research activities associated with its pre-clinical non-genotoxic conditioning program, with the goal of advancing toward one or more potential development candidates, although in August 2023, Graphite entered into an asset purchase agreement pursuant to which it transferred to Maro Bio Inc. ("Maro") its pre-clinical non-genotoxic conditioning program, including technology and intellectual property, while Graphite continued to explore strategic alternatives. As part of the corporate restructuring, Graphite also elected not to utilize the portion of its facilities space subject to its lease agreement with Bayside Area Development for purposes of its own operations.

In August 2023, Graphite entered into the LOA, pursuant to which Graphite granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. On September 12, 2023, Graphite entered into an amendment to the LOA with Kamau, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option.

In October 2023, Graphite entered into a sublease for a portion of the facility leased to it by Bayside Area Development, as well as an amendment to the master lease, which provided for an accelerated termination of the lease and a release of liabilities under the lease and the new sublease upon payment of a lump sum at the time of signing. Following this transaction, Graphite is no longer obligated for any rent payments under its lease with Bayside Area Development.

LENZ

LENZ Therapeutics, Inc. is a late-stage biopharmaceutical company focused on developing and commercializing innovative therapies to improve vision. Its initial focus is the treatment of presbyopia, the inevitable loss of near vision that impacts the daily lives of nearly all people over 45. In the United States, the estimated addressable population which suffers from this condition, known as presbyopes, is 128 million, almost

four times the number of individuals suffering from dry eye disease and three times the number of individuals suffering from childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. LENZ believes that a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday, without the need for reading glasses, will be a highly attractive commercial product with an estimated U.S. market opportunity in excess of $3 billion. It is LENZ's goal to develop and commercialize such a product, and the company has assembled an executive team with extensive clinical and commercial experience to execute this goal and become the category leader.

LENZ's product candidates LNZ100 and LNZ101 are preservative-free, single-use, once-daily eye drops containing aceclidine and aceclidine plus brimonidine, respectively. LENZ believes its product candidates are differentiated based on rapid onset, degree and duration of near vision improvement, as well as their ability to be used across the full age range of presbyopes, from their mid-40s to well into their mid-70s, as well as the broadest refractive range. Aceclidine's pupil-selective mechanism of action was demonstrated in LENZ's clinical trials where near vision improved while avoiding blurry distance vision. Its product candidates were well-tolerated in clinical trials, and their active ingredients have favorable tolerability profiles that have been well-established empirically.

In LENZ's INSIGHT Phase 2 trial, both LNZ100 and LNZ101 achieved the primary endpoint of three-lines or greater improvement in near visual acuity without losing one or more lines in Best Corrected Distance Visual Acuity at one hour post-treatment, with a response rate of 71% and 56%, respectively, compared to 6% for vehicle. Based on the positive results in its Phase 2 trial, LENZ is currently conducting three Phase 3 clinical trials (the CLARITY or Phase 3 trials) with results expected to be announced in the second quarter of 2024. Subject to successful completion of these trials, the company plans to submit a New Drug Application ("NDA") to the U.S. Food and Drug Administration ("FDA") for one or both of its product candidates in mid-2024. If approval is granted, LENZ will rigorously evaluate the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback to select and commercialize the product that LENZ believes will have the greatest commercial potential, with a launch target date in mid-2025.

Merger Sub

Merger Sub is a direct, wholly-owned subsidiary of Graphite and was formed solely for the purpose of carrying out the merger. Merger Sub's principal executive offices are located at 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080; and its telephone number is (857) 242-0170.

The Merger (see page 134)

On November 14, 2023, Graphite, Merger Sub, and LENZ entered into the Merger Agreement, pursuant to which Merger Sub will merge with and into LENZ, with LENZ surviving as a wholly-owned subsidiary of Graphite.

Graphite and LENZ expect the merger to be consummated during the first quarter of 2024, subject to the satisfaction or waiver of certain conditions to the closing, including, among other things, approval by the Graphite stockholders of the Nasdaq Stock Issuance Proposal and the Charter Amendment Proposal.

Immediately after the merger, on a pro forma basis and based upon the number of shares of Graphite common stock expected to be issued in the merger, pre-merger Graphite stockholders will own approximately 35% of the combined company on a fully-diluted basis and pre-merger LENZ stockholders will own approximately 65% of the combined company on a fully-diluted basis (prior to giving effect to the Graphite private placement and excluding shares reserved for future grants under the 2024 Plan and the 2024 ESPP). Following the consummation of the Graphite private placement, assuming a subscription amount of $53.5 million, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully diluted basis,

former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP).

For a more complete description of the merger and the exchange ratio, please see the sections titled "*The Merger"* and "*The Merger Agreement—Exchange Ratio*" beginning on pages 134 and 204, respectively, of this proxy statement/prospectus.

Graphite's Reasons for the Merger (see page 159)

In reaching its decision to approve the Merger Agreement and the transactions contemplated by the Merger Agreement, the Graphite board of directors considered a number of factors that it viewed as supporting its decision to approve the Merger Agreement, including:

- information concerning Graphite's business, the financial condition and prospects of Graphite, business and strategic objectives, as well as the risks of accomplishing those objectives;
- Graphite's business and financial prospects if it were to remain an independent company and the Graphite board of directors' determination that Graphite could not continue to operate as an independent company and needed to enter into an agreement with a strategic partner;
- potential strategic alternatives and merger partner candidates and the Graphite board of directors' view that no alternatives to the merger (including remaining a standalone company, a liquidation and dissolution of Graphite and the distribution of any available cash, a cash tender offer at a discount to net cash value, and alternative strategic transactions) were reasonably likely to create greater value to Graphite's stockholders;
- the Graphite board of directors' conclusion that the merger would provide Graphite's existing stockholders a significant opportunity to participate in the potential growth of the combined company following the merger, which will focus on LENZ's product candidates, while also receiving a cash payment following the closing of the merger on account of the special cash dividend; and
- the Graphite board of directors' belief that the $11.5 million enterprise value ascribed to Graphite, in addition to Graphite's anticipated $175 million net cash position, would provide the existing Graphite stockholders significant value for Graphite's public listing, and afford the Graphite stockholders a significant opportunity to participate in the potential growth of the combined company following the merger at the negotiated exchange ratio.

LENZ's Reasons for the Merger (see page 162)

The LENZ board of directors has unanimously approved the Merger Agreement, the merger and the transactions contemplated thereby. The LENZ board of directors reviewed several factors in reaching its decision and believes that the Merger Agreement, the merger and the transactions contemplated thereby are advisable and fair to, and in the best interests of LENZ and its stockholders. Several factors were considered by the LENZ board of directors, including:

- the merger will provide LENZ's current stockholders with greater liquidity by owning publicly-traded stock, and expanding both the access to capital for LENZ and the range of investors potentially available as a public company, compared to the investors LENZ could otherwise gain access to if it continued to operate as a privately-held company;
- the belief of the LENZ board of directors that this transaction provides a viable alternate public listing strategy and addresses the risk of the lack of an available market for an initial public offering at a later date; and

- the expected cash resources of the combined company, including the ability to support the combined company's current operations and to continue to build infrastructure and successfully commercialize LENZ's lead product candidate, subject to the successful completion of the ongoing Phase 3 trials, NDA submission and subsequent FDA approval.

Recommendation of the Graphite Board of Directors (see page 129)

- The Graphite board of directors has determined and declared the Merger Agreement and the transactions contemplated therein, including the issuance of shares of Graphite common stock to the LENZ stockholders pursuant to the Merger Agreement and the Graphite private placement, are fair to, advisable and in the best interests of Graphite and its stockholders. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Nasdaq Stock Issuance Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the amendment to the Graphite charter to effect the reverse stock split and change Graphite's name as described in this proxy statement/prospectus and has approved such proposal. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Charter Amendment Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the 2024 Plan, which is the combined company's 2024 Equity Incentive Plan, as described in this proxy statement/prospectus. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the 2024 Plan Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the 2024 ESPP, which is the combined company's 2024 Employee Stock Purchase Plan, as described in this proxy statement/prospectus. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the 2024 ESPP Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and believes that adjourning the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal is fair to, in the best interests of, and advisable to, Graphite and its stockholders and has approved and adopted the proposal. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Adjournment Proposal, if necessary, as described in this proxy statement/prospectus.

Interests of Graphite's Directors and Executive Officers in the Merger (see page 174**)**

In considering the recommendation of the Graphite board of directors with respect to issuing shares of Graphite common stock in the merger and other matters to be acted upon by the Graphite stockholders at the Graphite special meeting, the Graphite stockholders should be aware that Graphite's directors and executive officers have interests in the merger that are different from, or in addition to, the interests of the Graphite stockholders generally. These interests include the following:

- Certain of Graphite's directors are expected to become directors of the combined company after the effective time and, following the closing, will be compensated as non-employee directors of the combined company pursuant to a new non-employee director compensation policy that is expected to be adopted in connection with the closing;
- Under the Merger Agreement, Graphite's directors and executive officers are entitled to continued indemnification, expense advancement and insurance coverage;

- In connection with the merger, all outstanding equity awards held by Graphite's directors will fully accelerate in vesting;
- In connection with the merger, (i) prior to giving effect to the cash dividend and the reverse stock split, the vesting of each outstanding and unexercised Out-of-the-Money Graphite Option shall be fully accelerated, and each such option not exercised as of immediately prior to the effective time shall be cancelled at the effective time for no consideration and (ii) each Graphite option that has an exercise price per share less than $3.00 and is unexpired and unexercised as of the effective time, shall continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite options immediately prior to the effective time, subject to adjustment with respect to the special cash dividend and reverse stock split; and
- Each of Graphite's executive officers are parties to either, or a combination of, an employment agreement, separation agreement and/or retention agreement that provide for severance benefits, including accelerated vesting of outstanding equity awards and certain cash payments, in connection with the merger.

The Graphite board of directors was aware of these potential conflicts of interests and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the merger, and to recommend that the Graphite stockholders approve the proposals to be presented to the Graphite stockholders for recommendation at the Graphite special meeting as contemplated by this proxy statement/prospectus.

Interests of LENZ's Directors and Executive Officers in the Merger (see page 181)

In considering the recommendation of the LENZ board of directors with respect to approving the merger, LENZ stockholders should be aware that certain of its directors and executive officers have interests in the merger that are different from, or in addition to, the interests of LENZ stockholders generally.

Evert Schimmelpennink, Frederic Guerard, James McCollum, Shelley Thunen and Zach Scheiner are currently directors of LENZ and are expected to become directors of the combined company, and all of LENZ's executive officers are expected to become the executive officers of the combined company, upon the closing of the merger, in connection with which the executive officers are expected to enter into new confirmatory offer letters to reflect their status as executive officers of a publicly-traded company and to provide for certain increases to annual base salary and annual target bonus opportunity. In connection with the closing of the merger, each executive officer of the combined company is expected to become a participant in a new executive change in control and severance policy that is expected to be adopted in connection with the closing. Following completion of the merger, it is expected that the combined company will provide compensation to non-employee directors pursuant to a new non-employee director compensation policy that is expected to be adopted in connection with the closing, including grants of equity awards to non-employee directors that will take effect at the closing.

As of February 1, 2024, LENZ's non-employee directors and executive officers, together with their affiliated entities, beneficially owned, in the aggregate, approximately 71% of the outstanding shares of LENZ capital stock, excluding any shares issuable upon exercise of LENZ options or LENZ warrants held by such individuals and entities. Such shares of LENZ capital stock will be converted into shares of Graphite common stock at the effective time.

The LENZ board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the merger, and to recommend that the LENZ stockholders approve the merger as contemplated by this proxy statement/prospectus. For more information, please see the section titled "*The Merger—Interests of LENZ's Directors and Executive Officers in the Merger*" beginning on page 181 of this proxy statement/prospectus.

Opinion of Leerink Partners LLC (see page 169)

Graphite retained Leerink Partners LLC ("Leerink Partners") as its financial advisor in connection with the merger and the other transactions contemplated by the Merger Agreement. On November 14, 2023, Leerink Partners rendered to the Graphite board of directors its oral opinion, which was subsequently confirmed by delivery of a written opinion to the Graphite board of directors dated November 14, 2023, that, as of such date and based upon and subject to the various assumptions made, and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement was fair, from a financial point of view, to Graphite.

The full text of the written opinion of Leerink Partners, dated November 14, 2023, which describes the assumptions made and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, is attached as *Annex B* to this proxy statement/prospectus and is incorporated herein by reference. **Leerink Partners' financial advisory services and opinion were provided for the information and assistance of the Graphite board of directors (in their capacity as directors and not in any other capacity) in connection with and for purposes of the Graphite board of directors' consideration of the merger and the opinion of Leerink Partners addressed only the fairness, from a financial point of view, as of the date thereof, to Graphite of the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement. The opinion of Leerink Partners did not address any other term or aspect of the Merger Agreement or the merger and does not constitute a recommendation to any stockholder of Graphite or LENZ as to whether or how such holder should vote with respect to the merger or otherwise act with respect to the merger or any other matter.**

The full text of the written opinion of Leerink Partners should be read carefully in its entirety for a description of the assumptions made and qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion.

The Merger Agreement (see page 203)

Merger Consideration (page 203)

At the effective time, upon the terms and subject to the conditions set forth in the Merger Agreement, (a) each then-outstanding share of LENZ common stock (excluding shares held as treasury stock and automatically cancelled pursuant to the Merger Agreement and excluding dissenting shares, but including any LENZ restricted shares) will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio described in more detail below, (b) each then-outstanding share of LENZ preferred stock will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of LENZ common stock into which each such share of LENZ preferred stock is then convertible, (c) each then-outstanding LENZ option will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement and (d) each then-outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement.

Exchange Ratio (page 204)

The exchange ratio is calculated using a formula intended to allocate existing Graphite and LENZ stockholders a percentage of the combined company. Based on Graphite's and LENZ's capitalization as of November 9, 2023, the exchange ratio is estimated to be equal to approximately 1.4135. This estimate is subject to adjustment prior to closing for net cash at the cash determination time (and as a result, Graphite stockholders could own more, and LENZ stockholders could own less, or vice versa, of the combined company).

Treatment of LENZ Restricted Shares (page 206)

Under the terms of the Merger Agreement, at the effective time, each award of restricted shares of LENZ common stock that is unvested and outstanding immediately prior to the effective time will be converted into a number of shares of Graphite common stock equal to the product of (A) the number of shares of LENZ restricted shares, multiplied by (B) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Graphite common stock. The Graphite common stock issued upon such conversion will remain subject to the terms and conditions (including, without limitation, vesting and repurchase provisions) of such LENZ restricted shares as of immediately prior to the effective time.

Treatment of LENZ Options (page 206)

Under the terms of the Merger Agreement, at the effective time, each LENZ option that is outstanding and unexercised immediately prior to the effective time, whether or not vested, will be assumed and converted into a Graphite option. The number of shares of LENZ common stock underlying such LENZ options will be adjusted appropriately to reflect the exchange ratio. Graphite will assume LENZ's 2020 Equity Incentive Plan.

Treatment of LENZ Warrants (page 207)

Under the terms of the Merger Agreement, at the effective date, each warrant to purchase shares of LENZ capital stock that is outstanding and unexercised immediately prior to the effective time will be assumed and converted into a warrant to purchase shares of Graphite common stock. The number of shares of LENZ capital stock underlying such warrants will be adjusted appropriately to reflect the exchange ratio.

Treatment of Graphite Common Stock and Graphite Options (page 207)

Each share of Graphite common stock issued and outstanding at the time of the merger will remain issued and outstanding. In addition, each Graphite option that is outstanding immediately prior to the effective time, whether vested or unvested, will survive the closing and remain outstanding in accordance with its terms, provided that (i) each Out-of-the-Money Graphite Option shall be accelerated in full immediately prior to the effective time, and each such Out-of-the-Money Graphite Option not exercised as of immediately prior to the effective time shall be cancelled at the effective time for no consideration, and (ii) each Graphite option that has an exercise price per share less than $3.00, is unexpired and unexercised as of the effective time, shall continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite option immediately prior to the effective time.

Conditions to the Completion of the Merger (page 218)

To complete the merger, Graphite stockholders must approve the Graphite Stockholder Proposals and LENZ stockholders must adopt the Merger Agreement and approve the merger and the related transactions contemplated by the Merger Agreement. Additionally, each party's obligation to complete the merger is subject to the satisfaction or, to the extent permitted by applicable law, the written waiver by each of the parties, at or prior to closing, of various closing conditions set forth in the Merger Agreement.

Non-Solicitation (page 212)

The Merger Agreement contains non-solicitation provisions prohibiting Graphite and LENZ from inquiring about or seeking a competing transaction. Each of Graphite and LENZ have agreed that, subject to certain exceptions, neither it nor any of its subsidiaries shall, nor will either party or any of its subsidiaries authorize any of its representatives to, directly or indirectly (i) solicit, initiate or knowingly encourage, induce or facilitate the communication, making, submission or announcement of any Acquisition Proposal or Acquisition Inquiry (as each is defined in the section titled "*The Merger Agreement—Non-Solicitation*" beginning on page 212 of this proxy statement/prospectus) or take any action that would reasonably be expected to lead to an Acquisition

Proposal or Acquisition Inquiry, (ii) furnish any non-public information with respect to its or any person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry, (iii) engage in discussions or negotiations with any person with respect to any Acquisition Proposal or Acquisition Inquiry, (iv) approve, endorse or recommend any Acquisition Proposal (subject to certain exceptions), (v) execute or enter into any letter of intent or any contract contemplating or otherwise relating to an Acquisition Transaction, (vi) take any action that would reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry, or (vii) publicly propose to do any of the foregoing.

Board Recommendation Change (page 213)

Under the Merger Agreement, subject to certain exceptions described below, Graphite agreed that its board of directors may not withhold, amend, withdraw or modify (or publicly propose to withhold, amend, withdraw or modify) the recommendation of the Graphite board of directors in a manner adverse to LENZ (each, a "Graphite board recommendation change").

However, notwithstanding the foregoing, and subject to certain circumstances, the Graphite board of directors may make a Graphite board recommendation change, at any time prior to the approval of the proposals to be considered at the Graphite special meeting by the necessary vote of Graphite stockholders, if (x) Graphite has received a bona fide written Superior Offer (as defined in the section titled "*The Merger Agreement—Board Recommendation Change*" beginning on page 213 of this proxy statement/prospectus) or (y) there is a Graphite intervening event (as defined in the section titled "*The Merger Agreement—Board Recommendation Change*" beginning on page 213 of this proxy statement/prospectus).

Termination of the Merger Agreement (page 221)

Either party may terminate the Merger Agreement in certain circumstances, which would prevent the merger from being consummated.

Termination Fee (page 222)

The Merger Agreement provides for the payment of a termination fee of $7,500,000 by Graphite or LENZ to the other party upon termination of the Merger Agreement under specified circumstances.

Support Agreements (page 224)

Concurrently with the execution of the Merger Agreement, (i) certain stockholders of Graphite, owning in the aggregate approximately 52% of the outstanding shares of Graphite common stock, have entered into support agreements with Graphite and LENZ to vote all of their shares of Graphite common stock in favor of the Graphite Stockholder Proposals (the "Graphite Support Agreements"), and (ii) certain stockholders of LENZ, owning in the aggregate approximately 70% of the outstanding shares of LENZ capital stock, have entered into support agreements with Graphite and LENZ to vote all of their shares of LENZ capital stock in favor of the Merger Agreement and the related contemplated transactions and against any alternative acquisition proposals (the "LENZ Support Agreements," and, together with the Graphite Support Agreements, the "Support Agreements"). In the event of a Graphite board recommendation change (as defined herein), then the aggregate number of shares of Graphite common stock subject to the Graphite Support Agreement will automatically be reduced on a pro rata basis so that the aggregate number of such shares of Graphite common stock shall collectively only constitute the greater of (a) 20% of the outstanding shares of Graphite capital stock or (b) 30% of the votes cast in support of the Graphite Stockholder Proposals (as defined in the Merger Agreement).

The foregoing descriptions of the Support Agreements do not purport to be complete and are qualified in their entirety by the full text of the forms of Support Agreements, which are attached hereto as *Annex C* and *Annex D*.

Lock-Up Agreements (page 224)

Concurrently with the execution of the Merger Agreement, certain executive officers, directors and stockholders of Graphite and LENZ have entered into lock-up agreements with Graphite (the "Lock-Up Agreements"), pursuant to which such parties have agreed not to, except in limited circumstances, sell or transfer their shares of Graphite common stock, for the 90-day period following the closing.

The Graphite stockholders who have executed Lock-Up Agreements as of November 14, 2023, owned in the aggregate, approximately 43% of the shares of Graphite's outstanding capital stock.

The foregoing description of the Lock-Up Agreements does not purport to be complete and is qualified in its entirety by the full text of the form of Lock-Up Agreement, which is attached hereto as *Annex E*.

Subscription Agreement (page 224)

On November 14, 2023, concurrently with the execution of the Merger Agreement, Graphite entered into the Subscription Agreement with the PIPE investors, pursuant to which Graphite agreed to sell shares of Graphite common stock for an aggregate purchase price of approximately $53.5 million, which amount may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE investors. The closing of the Graphite private placement is expected to occur concurrently with, and is conditioned upon, the closing of the merger. Following the consummation of the Graphite private placement, assuming a subscription amount of $53.5 million, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP).

Management Following the Merger (see page 380)

Effective as of the closing of the merger, the combined company's executive officers are expected to be the following members of the LENZ executive management team prior to the merger:

Name	Position(s)
Evert Schimmelpennink	President, Chief Executive Officer, Secretary and Director
Shawn Olsson	Chief Commercial Officer
Marc Odrich, M.D.	Chief Medical Officer

Material U.S. Federal Income Tax Consequences of the Merger (see page 192)

For a discussion summarizing U.S. federal income tax considerations of the merger, see the section titled "*The Merger—Material U.S. Federal Income Tax Considerations—Material U.S. Federal Income Tax Consequences of the Merger.*"

Risk Factors (see page 26)

Both Graphite and LENZ are subject to various risks associated with their businesses and their industries. In addition, the merger, including the possibility that the merger may not be completed, poses a number of risks to each company and its respective securityholders, including the following risks:

Risks Related to the Merger

- The exchange ratio will not change or otherwise be adjusted based on the market price of Graphite common stock as the exchange ratio depends on Graphite's net cash at the closing and not the market price of Graphite common stock, so the merger consideration at the closing may have a greater or lesser value than at the time the Merger Agreement was signed;
- Failure to complete the merger may result in Graphite or LENZ paying a termination fee to the other party and could harm the common stock price of Graphite and the future business and operations of each company;
- Some Graphite and LENZ executive officers and directors have interests in the merger that are different from yours and that may influence them to support or approve the merger without regard to your interests;
- Graphite stockholders and LENZ stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger; and
- If the merger is not completed, Graphite's stock price may decline significantly.

Risks Related to Graphite

- Graphite has incurred significant losses since its inception, it expects to incur significant losses for the foreseeable future, and it may never achieve or maintain profitability;
- Graphite's limited operating history may make it difficult for you to evaluate the performance of Graphite's business to date and to assess its future viability;
- Graphite will need substantial additional funding. If Graphite is unable to raise capital when needed on acceptable terms, or at all, it would be forced to delay, reduce, or terminate its research and product development programs, future commercialization efforts or other operations;
- Graphite may not be successful in completing the merger or any strategic transactions that it may consummate in the future could have negative consequences;
- If Graphite is successful in completing the merger, Graphite may be exposed to other operational and financial risks;
- If the merger is not consummated, Graphite's board of directors may decide to pursue a dissolution and liquidation. In such an event, the amount of cash available for distribution to its stockholders will depend heavily on the timing of such liquidation as well as the amount of cash that will need to be reserved for commitments and contingent liabilities;
- Graphite's ability to consummate the merger depends on its ability to retain its employees required to consummate such transaction; and
- Graphite's corporate restructuring and the associated headcount reduction may not result in anticipated savings, could result in total costs and expenses that are greater than expected, and could disrupt its business.

Risks Related to LENZ

- LENZ is a late-stage biopharmaceutical company with limited operating history. It has incurred significant losses and negative cash flows from operations since its formation, and LENZ anticipates that it will continue to incur losses for the foreseeable future. LENZ has no products approved for commercial sale, which may make it difficult for you to evaluate its current business and predict its future success and viability;
- LENZ's business depends entirely on the development and commercialization of LNZ100 or LNZ101. If LENZ is unable to successfully complete its clinical development program for LNZ100 or LNZ101 and obtain the marketing approvals necessary to commercialize either of them, or experiences significant delays in doing so, or if after obtaining marketing approvals, LENZ fails to commercialize any one of these product candidates, its business will be materially harmed. LENZ currently generates no revenues from sales of any products and may never generate revenue or be profitable;
- Clinical trials are expensive, time-consuming, difficult to design and implement and involve an uncertain outcome. The outcome of preclinical testing and earlier clinical trials may not be predictive of the success of later clinical trials. The results of LENZ's clinical trials may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities, and it may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of its product candidates;
- Even if LNZ100, LNZ101 or any other product candidate receives marketing approval, they may fail to achieve market acceptance by eye care professionals and patients, and the market opportunity for these products, if and when approved, may be smaller than LENZ estimates;
- If LENZ is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market its product candidates on acceptable terms, LENZ may be unable to successfully commercialize its product candidates that obtain regulatory approval;
- If LENZ is unable to obtain and maintain sufficient intellectual property protection for its technology and products and product candidates LENZ may develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, its competitors or other third parties could develop and commercialize products similar or identical to LENZ, and its ability to successfully develop and, if approved, commercialize its product candidates may be adversely affected;
- LENZ faces significant competition, and if its competitors develop and market technologies or products more rapidly than LENZ does or that are more effective, safer or less expensive than the product candidates LENZ develops, its commercial opportunities will be negatively impacted. LENZ's product candidates may, if approved, also face competition from existing branded, generic and off-label products;
- LENZ relies, and expects to continue to rely, on third parties, including independent clinical investigators and contract research organizations, to conduct, supervise and monitor certain aspects of its clinical trials and any future preclinical studies. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, LENZ may not be able to obtain regulatory approval for or commercialize its product candidates, or such approval or commercialization may be delayed, and its business could be substantially harmed;
- LENZ contracts with third parties for the manufacture of its product candidates for its ongoing clinical trials, and expects to continue to do so for additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that LENZ will not have sufficient quantities of its product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair its development or commercialization efforts; and
- LENZ's success is highly dependent on its ability to attract and retain highly skilled executive officers and employees.

Risks Related to the Combined Company

- The market price of the combined company's common stock is expected to be volatile, the market price of the common stock may drop following the merger and an active trading market for the combined company's common stock may not develop and its stockholders may not be able to resell their shares of common stock for a profit, if at all;
- The combined company may need to raise additional financing in the future to fund its operations, which may not be available to it on favorable terms or at all;
- Provisions in the combined company's charter documents and under Delaware law could make an acquisition of the combined company more difficult and may discourage any takeover attempts which stockholders may consider favorable, and may lead to entrenchment of management;
- After completion of the merger, the combined company's executive officers, directors and principal stockholders will have the ability to control or significantly influence all matters submitted to the combined company's stockholders for approval; and
- The combined company will have broad discretion in the use of the cash and cash equivalents of the combined company, including the proceeds from the Graphite private placement, and may invest or spend the proceeds in ways with which you do not agree and in ways that may not increase the value of your investment.

These risks and other risks are discussed in greater detail under the section titled "*Risk Factors*" beginning on page 26 of this proxy statement/prospectus. Graphite and LENZ both encourage you to read and consider all of these risks carefully.

Litigation Related to the Merger (see page 31)

In connection with the merger, one complaint has been filed against Graphite and its directors, and four additional demands have been made seeking additional disclosures in the registration statement by purported Graphite stockholders. Graphite believes that the allegations, claims and demands asserted are without merit and intends to defend against them vigorously. In the event that Graphite subsequently receives additional complaints or demand letters related to the merger, Graphite will not provide additional disclosures unless those new complaints or letters contain material differences from those received to date. For a more detailed description of litigation related to the Transaction, see the section titled "*Risk Factors—Risks Related to the Merger—Lawsuits may be filed against Graphite, LENZ, or any of the members of their respective boards of directors arising out of the merger, which may delay or prevent the merger*."

Regulatory Approvals (see page 216)

Under the Merger Agreement, the merger cannot be completed until the waiting period (and any extensions thereof), if any, applicable to the merger under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), has expired or otherwise been terminated. The initial waiting period under the HSR Act is expected to expire at 11:59 p.m., Eastern Time, on December 21, 2023. For a further discussion summarizing regulatory approval considerations of the merger, see the section titled "*The Merger—Regulatory Approvals."*

Nasdaq Stock Market Listing (see page 198)

Graphite has filed an initial listing application for the combined company common stock with Nasdaq. If such application is accepted, Graphite anticipates that the common stock of the combined company will be listed on Nasdaq following the closing of the merger under the trading symbol "LENZ". It is a condition of the consummation of the merger that Graphite receive confirmation from Nasdaq that the combined company has been approved for listing on

Nasdaq, but there can be no assurance such listing condition will be met or that Graphite will obtain such confirmation from Nasdaq. If such listing condition is not met or if such confirmation is not obtained, the merger will not be consummated unless the condition is waived. The Nasdaq condition set forth in the Merger Agreement is not expected to be waived by the applicable parties.

Anticipated Accounting Treatment (see page 198)

The merger is expected to be treated by Graphite as a reverse merger and will be accounted for as a reverse recapitalization in accordance with U.S. generally accepted accounting principles ("GAAP"). For financial reporting, LENZ is considered to be the accounting acquirer, based on the expectation that, immediately following the merger: (i) LENZ's equity holders will own a substantial majority of the voting rights in the combined company; (ii) LENZ will designate a majority (five of seven) of the initial members of the board of directors of the combined company; and (iii) LENZ's senior management will hold all key positions in senior management of the combined company. The combined company will be named LENZ Therapeutics, Inc. and be headquartered in Del Mar, CA. Accordingly, the merger is expected to be treated as the equivalent of LENZ issuing stock to acquire the net assets of Graphite. As a result of the merger, LENZ's assets and liabilities will be recorded at their pre-combination carrying amounts and Graphite's assets and liabilities will be measured and recognized at their fair values as of the effective time. Upon consummation of the merger, the historical financial statements of LENZ will become the historical consolidated financial statements of the combined company. See the "*Unaudited Pro Forma Condensed Combined Financial Information*" included elsewhere in this proxy statement/prospectus for additional information.

Appraisal Rights (see page 199)

Holders of Graphite common stock are not entitled to appraisal rights in connection with the merger under Delaware law. LENZ stockholders and beneficial owners of LENZ capital stock are entitled to, under certain circumstances, appraisal rights in connection with the merger under Delaware law.

Comparison of Stockholder Rights (see page 412)

Both Graphite and LENZ are incorporated under the laws of the State of Delaware and, accordingly, the rights of the stockholders of each are currently, and will continue to be, governed by the Delaware General Corporation Law ("DGCL"). If the merger is completed, LENZ stockholders will become Graphite stockholders, and their rights will be governed by the DGCL, the amended and restated bylaws of Graphite, as amended and restated in connection with the merger, and the Graphite charter, as may be further amended by Proposal No. 2 if approved by the Graphite stockholders at the Graphite special meeting. The rights of Graphite stockholders contained in Graphite's charter and bylaws (as amended in connection with the merger) differ from the rights of LENZ stockholders under the amended and restated certificate of incorporation and bylaws of LENZ, as more fully described under the section titled "*Comparison of Rights of Holders of Graphite Capital Stock and LENZ Capital Stock*" beginning on page 412 of this proxy statement/prospectus.

MARKET PRICE AND DIVIDEND INFORMATION

The Graphite common stock is currently listed on The Nasdaq Global Market under the symbol "GRPH".

The closing price of the Graphite common stock on November 14, 2023, the last day of trading prior to the announcement of the merger, as reported on The Nasdaq Global Market, was $2.33 per share.

Because the market price of the Graphite common stock is subject to fluctuation, the market value of the shares of the Graphite common stock that the LENZ stockholders will be entitled to receive in the merger may increase or decrease.

LENZ is a private company and its shares of common stock are not publicly traded.

Assuming approval of Proposal Nos. 1 and 2 and successful application for initial listing with Nasdaq, following the consummation of the merger, the Graphite common stock will trade on Nasdaq under Graphite's new name, "LENZ Therapeutics, Inc.," and new trading symbol "LENZ".

As of January 29, 2024, the record date for the Graphite special meeting, there were approximately 19 registered holders of record of the Graphite common stock. As of January 29, 2024, LENZ had 67 holders of record of LENZ common stock and 54 holders of record of LENZ preferred stock. For detailed information regarding the beneficial ownership of certain Graphite and LENZ stockholders, see the sections titled "*Principal Stockholders of Graphite*" and "*Principal Stockholders of LENZ*" beginning on pages 425 and 427, respectively, of this proxy statement/prospectus."

Dividends

Graphite has never declared or paid any cash dividends on the Graphite common stock and does not anticipate paying cash dividends on the Graphite common stock for the foreseeable future, except the special cash dividend that Graphite will declare and pay to the holders of record of outstanding shares of Graphite common stock as of a record date prior to the effective time of the merger, to be set by the Graphite board of directors as close as reasonably practicable to (but not later than) the anticipated closing date. The aggregate amount of the special cash dividend will equal $60.0 million, subject to adjustment (i) if (x) Graphite's net cash at closing exceeds $175 million and (y) the Graphite private placement is more than $75,000,000, then Graphite may increase the amount of the special cash dividend by an amount not to exceed the lesser of such excess as described in the foregoing clause (y) and $75,000,000, and (ii) if Graphite's net cash at closing minus the special cash dividend is less than $115,000,000, then Graphite shall (unless otherwise requested by LENZ) reduce the special cash dividend by the amount such that the final Graphite net cash at closing minus the amount of the special cash dividend, is at least $115,000,000. Notwithstanding the foregoing, any determination to pay cash dividends subsequent to the merger will be at the discretion of the combined company's then-current board of directors and will depend upon a number of factors, including the combined company's results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors the then-current board of directors deems relevant.

LENZ has never paid or declared any cash dividends on the LENZ capital stock. If the merger does not occur, LENZ does not anticipate paying any cash dividends on the LENZ capital stock in the foreseeable future, and LENZ intends to retain all available funds and any future earnings, if any, to finance the operation and expansion of its business and does not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of the LENZ board of directors and will depend upon a number of factors, including its results of operations, financial condition, current and anticipated cash needs, future prospects, contractual restrictions, restrictions imposed by applicable laws and other factors the LENZ board of directors deems relevant.

RISK FACTORS

The combined company will be faced with a market environment that cannot be predicted and that involves significant risks, many of which will be beyond its control. In addition to the other information contained or incorporated by reference in this proxy statement/prospectus, you should carefully consider the material risks described below before deciding how to vote your shares of Graphite common stock. You should also read and consider the other information in this proxy statement/prospectus and additional information about Graphite set forth in its Annual Report on Form 10-K for the fiscal year ended December 31, 2022, which is filed with the SEC, as such risks may be updated or supplemented in its subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, each of which is incorporated by reference into this proxy statement/prospectus. Please see the section titled "Where You Can Find More Information" beginning on page 432 of this proxy statement/prospectus for further information regarding the documents incorporated by reference into this proxy statement/prospectus.

Risks Related to the Merger

Failure to complete, or delays in completing, the potential merger with LENZ, announced on November 15, 2023 could materially and adversely affect Graphite's results of operations, business, financial results and/or common stock price.

On November 14, 2023, Graphite entered into an Agreement and Plan of Merger, which is referred to hereinafter as the "Merger Agreement", with LENZ, pursuant to which, if all of the conditions to closing are satisfied or waived, a wholly-owned subsidiary of Graphite will merge with and into LENZ, with LENZ surviving as Graphite's wholly-owned subsidiary. This transaction is referred to hereinafter as the "merger." Consummation of the merger is subject to certain closing conditions, a number of which are not within Graphite's control. Any failure to satisfy these required conditions to closing may prevent, delay or otherwise materially adversely affect the completion of the transaction. Graphite cannot predict with certainty whether or when any of the required closing conditions will be satisfied or if another uncertainty may arise and cannot assure you that Graphite will be able to successfully consummate the merger as currently contemplated under the Merger Agreement or at all.

Graphite's efforts to complete the merger could cause substantial disruptions in, and create uncertainty surrounding, Graphite's business, which may materially adversely affect Graphite's results of operation and Graphite's business. Uncertainty as to whether the merger will be completed may affect Graphite's ability to recruit prospective employees or to retain and motivate existing employees. Employee retention may be particularly challenging while the transaction is pending because employees may experience uncertainty about their roles following the transaction. Uncertainty as to whether the merger will be completed could adversely affect Graphite's business and Graphite's relationship with collaborators, suppliers, vendors, regulators and other business partners. For example, vendors, collaborators and other counterparties may defer their decisions to work with Graphite or seek to change their existing business relationships with Graphite. Changes to, or termination of, existing business relationships could adversely affect Graphite's results of operations and financial condition, as well as the market price of Graphite's common stock. The adverse effects of the pendency of the transaction could be exacerbated by any delays in completion of the transaction or termination of the Merger Agreement.

The exchange ratio will not change or otherwise be adjusted based on the market price of Graphite common stock as the exchange ratio depends on the Graphite net cash at the closing and not the market price of Graphite common stock, so the merger consideration at the closing may have a greater or lesser value than at the time the Merger Agreement was signed.

At the effective time, as described in the Merger Agreement, outstanding shares of LENZ capital stock will be converted into shares of Graphite common stock. Based on Graphite's and LENZ's capitalization as of November 9, 2023, the exchange ratio is estimated to be equal to approximately 1.4135. After applying this estimated exchange ratio and giving effect to the Graphite private placement, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own

approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP), in each case subject to certain assumptions, including, but not limited to, Graphite's net cash as of closing being between $115 million and $175 million and a subscription amount of $53.5 million in the Graphite private placement. In the event Graphite's net cash is below $115 million, the exchange ratio will be adjusted such that the number of shares issued to the former LENZ securityholders will be increased, and Graphite stockholders will own a smaller percentage of the combined company following the merger.

Any changes in the market price of Graphite stock before the completion of the merger will not affect the exchange ratio or the number of shares LENZ stockholders will be entitled to receive pursuant to the Merger Agreement. Therefore, if before the completion of the merger, the market price of Graphite common stock increases from the market price on the date of the Merger Agreement, then LENZ stockholders could receive merger consideration with substantially higher value for their shares of LENZ capital stock than the parties had negotiated when they established the exchange ratio. Similarly, if before the completion of the merger the market price of Graphite common stock decreases from the market price on the date of the Merger Agreement, then LENZ stockholders could receive merger consideration with substantially lower value than the parties had negotiated when they established the exchange ratio. The Merger Agreement does not include a price-based termination right.

Failure to complete the merger may result in Graphite paying a termination fee to LENZ, and could harm the common stock price of Graphite and future business and operations.

If the merger is not completed, Graphite is subject to the following risks:

- if the Merger Agreement is terminated under specified circumstances, Graphite could be required to pay LENZ a termination fee of $7.5 million;
- the price of Graphite common stock may decrease and could fluctuate significantly; and
- Graphite will incur substantial costs related to the merger, such as financial advisor, legal and accounting fees, a majority of which must be paid even if the merger is not completed.

If the Merger Agreement is terminated and the LENZ board of directors determines to seek another business combination, there can be no assurance that Graphite will be able to find another third party with whom to transact a business combination that would yield comparable or greater benefits.

If the conditions to the merger are not satisfied or waived, the merger may not occur.

Even if the merger is approved by the stockholders of LENZ and Proposal Nos. 1 and 2, as described in this proxy statement/prospectus, are approved by the Graphite stockholders, specified conditions must be satisfied or, to the extent permitted by applicable law, waived to complete the merger. These conditions are set forth in the Merger Agreement and each material condition to the completion of the merger is described in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" beginning on page 218 of this proxy statement/prospectus. Graphite and LENZ cannot assure you that all of the conditions to the consummation of the merger will be satisfied or waived. If the conditions are not satisfied or waived, the merger may not occur or the closing may be delayed.

The merger may be completed even though a material adverse effect may result from the public announcement of the merger, industry-wide changes or other causes.

In general, neither Graphite or LENZ is obligated to complete the merger if there is a material adverse effect affecting the other party between November 14, 2023 (the date of the Merger Agreement) and the closing of the merger. However, certain types of events are excluded from the concept of a "material adverse effect." Such exclusions include but are not limited to changes in general economic or political conditions, industry-wide changes, changes resulting from the public announcement of the merger, natural disasters, pandemics (including

the COVID-19 pandemic), public health events, other force majeure events, acts or threat of terrorism or war and changes in GAAP. Therefore, if any of these events were to occur and adversely affect Graphite or LENZ, the other party would still be required to consummate the merger notwithstanding such material adverse effects. If any such adverse effects occur and Graphite or LENZ consummates the closing of the merger, the common stock price of the combined company may suffer. This, in turn, may reduce the value of the merger to the stockholders of Graphite, LENZ, or both. For a more complete discussion of what constitutes a material adverse effect for Graphite or LENZ, see the section titled "*The Merger Agreement—Representations and Warranties*" beginning on page 208 of this proxy statement/prospectus.

If Graphite and LENZ complete the merger, the combined company may need to raise additional capital by issuing equity securities or additional debt or through licensing arrangements, which may cause significant dilution to the combined company's stockholders or restrict the combined company's operations.

On November 14, 2023, Graphite entered into the Subscription Agreement with certain investors, including existing investors of LENZ, pursuant to which the investors agreed to purchase, in the aggregate, $53.5 million in shares of Graphite common stock immediately following the closing of the merger, which amount may be increased to up to $125 million through additional subscriptions under the subscription agreement from additional investors. The closing of the Graphite private placement is conditioned upon the satisfaction or waiver of the conditions to the closing of the merger, as well as certain other conditions. The shares of Graphite common stock issued in the Graphite private placement will result in dilution to all securityholders of the combined company (i.e., both Graphite securityholders and former LENZ securityholders). The Graphite private placement is more fully described under the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 of this proxy statement/prospectus.

Even if the Graphite private placement closes as expected, the combined company may need to raise additional capital in the future. Additional financing may not be available to the combined company when it is needed or may not be available on favorable terms. To the extent that the combined company raises additional capital by issuing equity securities, such financing will cause additional dilution to all securityholders of the combined company, including Graphite securityholders and former LENZ securityholders. It is also possible that the terms of any new equity securities may have preferences over the combined company's common stock. Any debt financing into which the combined company enters may involve covenants that restrict its operations. These restrictive covenants may include limitations on additional borrowing and specific restrictions on the use of the combined company's assets, as well as prohibitions on its ability to grant liens, pay dividends, redeem its stock or make investments. In addition, if the combined company raises additional funds through licensing arrangements, the terms of such arrangements may not be favorable to the combined company.

Some Graphite and LENZ directors and executive officers may have interests in the merger that are different from yours and that may influence them to support or approve the merger without regard to your interests.

Directors and executive officers of Graphite and LENZ may have interests in the merger that are different from, or in addition to, the interests of other Graphite stockholders generally. These interests with respect to Graphite's directors and executive officers may include, among others, acceleration of stock option or restricted stock unit vesting, retention bonus payments, extension of exercisability periods of previously issued stock option grants, severance payments if employment is terminated in a qualifying termination in connection with the merger and rights to continued indemnification, expense advancement and insurance coverage. One or more members of the Graphite board of directors may continue as directors of the combined company after the effective time, and, following the closing of the merger, may therefore be eligible to be compensated as non-employee directors of the combined company. These interests with respect to LENZ's directors and executive officers may include, among others, that certain of LENZ's directors and executive officers hold options, subject to vesting, to purchase shares of LENZ common stock which, after the effective time, will be converted into and become options to purchase shares of the common stock of the combined company; that LENZ's executive officers are expected to continue as executive officers of the combined company after the effective time and are expected to enter into new confirmatory offer letters to reflect their status as executive

officers of a publicly-traded company and to provide for certain increases to annual base salary and annual target bonus opportunity; and that all of Graphite's and LENZ's directors and executive officers are entitled to certain indemnification and liability insurance coverage pursuant to the terms of the Merger Agreement.

In addition, certain of each of Graphite's and LENZ's directors are affiliated with investment funds which hold an interest in LENZ. Further, certain members of LENZ's current board of directors will continue as directors of the combined company after the effective time, and, following the closing of the merger, will be eligible to be compensated as non-employee directors of the combined company pursuant to a non-employee director compensation policy that is expected to be adopted in connection with the closing and take effect at the effective time.

The Graphite and LENZ board of directors were aware of and considered those interests, among other matters, in reaching their decisions to approve and adopt the Merger Agreement, approve the merger, and recommend the approval of the Merger Agreement to Graphite and LENZ stockholders. These interests, among other factors, may have influenced the directors and executive officers of Graphite and LENZ to support or approve the merger.

For more information regarding the interests of Graphite and LENZ directors and executive officers in the merger, please see the sections titled "*The Merger—Interests of Graphite's Directors and Executive Officers in the Merger*" beginning on page 174 and "*The Merger—Interests of LENZ's Directors and Executive Officers in the Merger*" beginning on page 181 of this proxy statement/prospectus.

Graphite stockholders and LENZ stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger, including the conversion shares of common stock issued in the Graphite private placement.

If the combined company is unable to realize the full strategic and financial benefits currently anticipated from the merger, Graphite stockholders and LENZ stockholders will have experienced substantial dilution of their ownership interests without receiving any commensurate benefit, or will have only received part of the commensurate benefit resulting from the extent to which the combined company is able to realize the strategic and financial benefits currently anticipated from the merger.

If the merger is not completed, Graphite's stock price may decrease significantly.

The market price of Graphite common stock is subject to significant fluctuations. Market prices for securities of pharmaceutical, biotechnology and other life science companies have historically been particularly volatile. In addition, the market price of Graphite common stock will likely be volatile based on whether stockholders and other investors believe that Graphite can complete the merger or otherwise raise additional capital to support Graphite's operations if the merger is not consummated and another strategic transaction cannot be identified, negotiated and consummated in a timely manner, if at all. The volatility of the market price of Graphite common stock may be exacerbated by low trading volume. Additional factors that may cause the market price of Graphite common stock to fluctuate include:

- the entry into, or termination of, Graphite's key agreements, including commercial partner agreements;
- announcements by Graphite's commercial partners or competitors of new commercial products, Graphite's clinical progress or lack thereof, significant contracts, commercial relationships or capital commitments;
- the loss of Graphite's key employees;
- future sales of Graphite's common stock;
- general and industry-specific economic conditions that may affect its research and development expenditures;
- Graphite's failure to meet industry analyst expectations; and
- period-to-period fluctuations in financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of Graphite common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against such companies.

Graphite and LENZ securityholders will generally have a reduced ownership and voting interest in, and will exercise less influence over the management of, the combined company following the completion of the merger as compared to their current ownership and voting interests in the respective companies.

After the completion of the merger, the current stockholders of Graphite and LENZ will generally own a smaller percentage of the combined company than their ownership of their respective companies prior to the merger. Immediately after the merger and after giving effect to the Graphite private placement, the Graphite stockholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP), subject to certain assumptions, including, but not limited to, Graphite's net cash as of closing totaling between $115 million and $175 million and a subscription amount of $53.5 million in the Graphite private placement.

During the pendency of the merger, neither Graphite nor LENZ will be able to enter into a business combination with another party on more favorable terms because of restrictions in the Merger Agreement, which could adversely affect their respective business prospects.

Covenants in the Merger Agreement impede the ability of Graphite and LENZ to make acquisitions during the pendency of the merger, subject to specified exceptions. As a result, if the merger is not completed, the parties may be at a disadvantage with respect to their competitors during that period. In addition, while the Merger Agreement is in effect, each party is generally prohibited from soliciting, seeking, initiating or knowingly encouraging, inducing or facilitating the communication, making, submission or announcement of any acquisition proposal or acquisition inquiry or taking any action that could reasonably be expected to lead to certain transactions involving a third party, including a merger, sale of assets or other business combination, subject to specified exceptions. Even if such a transaction would be favorable to such party's stockholders, such party would be unable to pursue it. For more information, see the section titled "*The Merger Agreement—Non-Solicitation*" beginning on page 212 of this proxy statement/prospectus.

Certain provisions of the Merger Agreement may discourage third parties from submitting competing proposals, including proposals that may be superior to the transactions contemplated by the Merger Agreement.

The terms of the Merger Agreement prohibit each of Graphite and LENZ from soliciting competing proposals or cooperating with persons making unsolicited takeover proposals except in limited circumstances as described in further detail in the section titled "*The Merger Agreement—Non-Solicitation*" beginning on page 212 of this proxy statement/prospectus. In addition, if Graphite terminates the Merger Agreement under specified circumstances, Graphite will be required to pay LENZ a termination fee of $7.5 million. This termination fee may discourage third parties from submitting competing proposals to Graphite or its stockholders and may cause the Graphite or LENZ boards of directors to be less inclined to recommend a competing proposal.

Because the lack of a public market for LENZ common stock makes it difficult to evaluate the fair market value of its capital stock, the value of the Graphite common stock to be issued to LENZ stockholders may be more or less than the fair market value of LENZ common stock.

The outstanding capital stock of LENZ is privately held and is not traded on any public market. The lack of a public market makes it difficult to determine the fair market value of LENZ capital stock. Because the percentage of Graphite equity to be issued to LENZ stockholders was determined based on negotiations between

the parties, it is possible that the value of the Graphite common stock to be issued to LENZ stockholders will be more or less than the fair market value of LENZ capital stock.

If the merger does not qualify as a reorganization under the Internal Revenue Code of 1986, as amended (the "Code"), U.S. holders of LENZ capital stock may be taxed on the full amount of the consideration received in the merger.

As discussed more fully under the section titled "*The Merger—Material U.S. Federal Income Tax Considerations—Material U.S. Federal Income Tax Consequences of the Merger*," and subject to the limitations and qualifications described therein, in the opinion of Wilson Sonsini, the merger will qualify for U.S. federal income tax purposes as a "reorganization" within the meaning of Section 368(a) of the Code and no gain will be recognized by U.S. holders of LENZ capital stock who receive only Graphite common stock in the merger. None of the parties to the Merger Agreement have sought or intend to seek any ruling from the IRS regarding the qualification of the merger as a reorganization within the meaning of Section 368(a) of the Code. If the merger does not qualify for the U.S. federal income tax treatment described herein, U.S. holders of LENZ capital stock may be taxed on any gain realized up to the full fair market value of any Graphite common stock they receive in the merger.

Lawsuits may be filed against Graphite, LENZ, or any of the members of their respective boards of directors arising out of the merger, which may delay or prevent the merger.

Putative stockholder complaints, including stockholder class action complaints, and other complaints may be filed against Graphite, the Graphite board of directors, LENZ, the LENZ board of directors and others in connection with the transactions contemplated by the Merger Agreement. The outcome of litigation is uncertain, and Graphite or LENZ may not be successful in defending against any such future claims. Lawsuits that may be filed against Graphite, the Graphite board of directors, LENZ, or the LENZ board of directors could delay or prevent the merger, divert the attention of Graphite's and LENZ's management and employees from their day-to-day business and otherwise adversely affect Graphite and LENZ financially.

As of February 5, 2024, one complaint has been filed by a purported Graphite stockholder against Graphite and the Graphite board of directors in connection with the proposed merger. Specifically, on February 1, 2024, a purported stockholder filed a complaint, captioned *Chew v. Graphite Bio, Inc., et al*., No. 3:24-cv-00613 (N.D.Cal.) (the "Complaint"), in federal court in California against Graphite and its board of directors. The Complaint alleges that the defendants filed or caused to be filed a materially incomplete and misleading preliminary registration statement with the SEC and asserts claims under Sections 14(a) and 20(a) of the Exchange Act. The Complaint seeks an order enjoining the proposed merger, or in the event that the proposed merger is consummated, an order rescinding the merger or awarding rescissory damages, as well as costs, including attorneys' and experts' fees. In addition, Graphite and the Graphite board of directors have received four additional demands from purported Graphite stockholders seeking additional disclosures in the registration statement (collectively, the "Demands"). Graphite cannot predict the outcome of the Complaint or the Demands. Graphite believes that the allegations and claims asserted in the Complaint and the Demands are without merit and intends to defend against them vigorously. Additional lawsuits and demand letters arising out of the merger may also be filed or received in the future, though Graphite will not provide additional disclosures unless those new complaints or letters contain material differences from those received to date.

Graphite is substantially dependent on Graphite's remaining employees to facilitate the consummation of the merger.

As of February 1, 2024, Graphite had only six full-time employees. Graphite's ability to successfully complete the merger depends in large part on Graphite's ability to retain certain remaining personnel. Despite Graphite's efforts to retain these employees, one or more employees may terminate their employment with Graphite on short notice. The loss of the services of certain employees could potentially harm Graphite's ability to consummate the merger and run Graphite's day-to-day business operations, as well as fulfill Graphite's reporting obligations as a public company.

Risks Related to the Proposed Reverse Stock Split

The reverse stock split may not increase the combined company's stock price over the long-term.

The Graphite board of directors believes that a reverse stock split may be desirable for a number of reasons. Graphite common stock is currently, and is expected to continue to be following the completion of the merger, listed on Nasdaq. According to the applicable Nasdaq rules, in order for Graphite common stock to continue to be listed on Nasdaq, Graphite must satisfy certain requirements established by Nasdaq. The Graphite board of directors expects that a reverse stock split of Graphite common stock will increase the market price of Graphite common stock so that Graphite will be able to maintain compliance with the relevant Nasdaq listing requirements for the foreseeable future, although Graphite cannot assure holders of Graphite common stock that it will be able to do so. The Graphite board of directors also believes a higher stock price may help generate investor interest in the combined company, help the combined company attract and retain employees, increase trading volume in the combined company's common stock, and facilitate future financings by the combined company. While it is expected that the reduction in the number of outstanding shares of common stock will proportionally increase the market price of Graphite's common stock, it cannot be assured that the reverse stock split will increase the market price of its common stock by a multiple of the reverse stock split ratio mutually agreed by Graphite and LENZ, or result in any permanent or sustained increase in the market price of Graphite's common stock, which is dependent upon many factors, including Graphite's business and financial performance, general market conditions and prospects for future success. Thus, while the stock price of Graphite might meet the listing requirements for Nasdaq initially after the reverse stock split, it cannot be assured that it will continue to do so.

The reverse stock split may decrease the liquidity of the combined company's common stock.

Although the Graphite board of directors believes that the anticipated increase in the market price of the combined company's common stock resulting from the proposed reverse stock split could encourage interest in its common stock and possibly promote greater liquidity for its stockholders, such liquidity could also be adversely affected by the reduced number of shares outstanding after the reverse stock split. The reduction in the number of outstanding shares may lead to reduced trading and a smaller number of market makers for the combined company's common stock. In addition, the reverse stock split may not result in an increase in the combined company's stock price necessary to satisfy Nasdaq's initial listing requirements for the combined company.

The reverse stock split may lead to a decrease in the combined company's overall market capitalization.

Should the market price of the combined company's common stock decline after the reverse stock split, the percentage decline may be greater, due to the smaller number of shares outstanding, than it would have been prior to the reverse stock split. A reverse stock split is often viewed negatively by the market and, consequently, can lead to a decrease in the combined company's overall market capitalization. If the per share market price does not increase in proportion to the reverse stock split ratio, then the value of the combined company, as measured by its stock capitalization, will be reduced. In some cases, the per-share stock price of companies that have effected reverse stock splits subsequently declined back to pre-reverse split levels, and accordingly, it cannot be assured that the total market value of the combined company's common stock will remain the same after the reverse stock split is effected, or that the reverse stock split will not have an adverse effect on the combined company's stock price due to the reduced number of shares outstanding after the reverse stock split.

Risks Related to Graphite

Risks Related to Graphite's Financial Position, Limited Operating History and Need for Additional Capital in the Event the Merger is not Consummated

Graphite has incurred significant losses since its inception, it expects to incur significant losses for the foreseeable future, and it may never achieve or maintain profitability.

Since Graphite's inception, it has incurred significant net losses, has not generated any revenue from product sales to date and has financed its operations principally through the net proceeds raised in its initial public offering (the "IPO") and private placements of its redeemable convertible preferred stock. Graphite's net loss for

the fiscal years ended December 31, 2022 and 2021 was $101.1 and $70.8 million, respectively. As of December 31, 2022, Graphite had an accumulated deficit of $242.4 million. Graphite expects to continue to incur significant and increasing losses for the foreseeable future. The net losses Graphite incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of Graphite's results of operations may not be a good indication of Graphite's future performance. Should Graphite resume development of product candidates, Graphite anticipates that its expenses would increase substantially if and as it:

- initiates and conducts clinical trials for any product candidates that it may identify and develop;
- initiates new research and discovery programs and preclinical development of product candidates from any new research programs;
- seeks to identify additional research programs and additional product candidates;
- hires additional research and development and clinical personnel;
- maintains, expands, enforces, defends and protects any intellectual property portfolio and provides reimbursement of third-party expenses related to its patent portfolio;
- seeks marketing approvals for any of such product candidates that successfully complete clinical trials;
- establishes its manufacturing capability, including developing its contract development and manufacturing relationships, and should it decide to do so, building and maintaining a commercial-scale current Good Manufacturing Practices ("cGMP"), manufacturing facility;
- ultimately establishes a sales, marketing, and distribution infrastructure to commercialize any products for which it may obtain marketing approval;
- adds operational, financial, and management information systems and personnel;
- acquires or in-licenses product candidates, intellectual property and technologies; and
- operates as a public company.

To date, Graphite has not successfully completed a clinical trial for any product candidate. To become and remain profitable, Graphite would have to develop and eventually commercialize products with significant market potential. This would require Graphite to be successful in a range of challenging activities, including identifying product candidates, completing preclinical testing and clinical trials of product candidates, obtaining marketing approval for these product candidates, manufacturing, marketing, and selling those products for which Graphite may obtain marketing approval, obtaining market acceptance for such products and satisfying any post-marketing requirements. Graphite may never succeed in these activities and, even if it does, may never generate revenue in an amount sufficient to achieve profitability. Graphite currently has no ongoing programs. Graphite commenced its Phase 1/2 clinical trial of nulabeglogene autogedtemcel (nula-cel), in SCD in November 2021, and in February 2023 announced that it was discontinuing its development of nula-cel. In August 2023, Graphite entered into an agreement pursuant to which Graphite granted a third party rights to acquire Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets, and a separate agreement pursuant to which Graphite transferred to a third party its rights to its pre-clinical non-genotoxic conditioning program. Following these transactions, Graphite had no remaining ongoing development programs. However, Graphite continues to hold, maintain and preserve the technology, licenses and intellectual property related to its nula-cel program and related preclinical platform assets subject to Kamau's option using its remaining workforce. Because of the numerous risks and uncertainties associated with developing gene therapy and gene editing product candidates, Graphite is unable to predict the extent of any future losses or when Graphite will become profitable, if ever. If Graphite does achieve profitability, Graphite may not be able to sustain or increase profitability on a quarterly or annual basis. Graphite's failure to become and remain profitable would decrease the value of Graphite and Graphite's stock price and could impair its ability to raise capital, maintain and fund its research and development efforts, expand its business, or continue its operations. A decline in the value of Graphite could also cause you to lose all or part of your investment.

Graphite's limited operating history may make it difficult for you to evaluate the performance of Graphite's business to date and to assess its future viability.

Graphite is an early-stage company. Graphite was founded in 2017 and commenced operations in 2020. Graphite's operations to date have been limited to organizing and staffing its company, business planning, raising capital, acquiring and developing Graphite's platform and technology, identifying potential product candidates, establishing and maintaining Graphite's intellectual property portfolio, undertaking preclinical studies and preparing for clinical trials. Other than nula-cel, which was being evaluated in a Phase 1/2 clinical trial, and which Graphite terminated development of in February 2023, all of its research programs were still in the preclinical or research stage of development. Graphite has not demonstrated an ability to initiate or successfully complete any clinical trials, including large-scale, pivotal clinical trials, obtain marketing approvals, manufacture a commercial-scale product, or arrange for a third party to do so on Graphite's behalf, or conduct sales and marketing activities necessary for successful commercialization. Typically, it takes about 10 to 15 years to develop a new product from the time it is discovered to when it is available for treating patients. Consequently, any predictions you make about the likelihood of Graphite's future success or viability may not be as accurate as they could be if Graphite had a longer operating history.

Graphite's limited operating history, particularly in light of the rapidly evolving gene editing field, may make it difficult to evaluate its technology and industry and predict Graphite's future performance. Graphite's very short history as an operating company makes any assessment of the likelihood of Graphite's future success and viability subject to significant uncertainty. Graphite will encounter risks and difficulties frequently experienced by very early-stage companies in rapidly evolving fields. If Graphite does not address these risks successfully, Graphite's business will suffer.

In addition, as a new business, Graphite may encounter other unforeseen expenses, difficulties, complications, delays, and other known and unknown factors. Graphite will need to transition from a company with a research focus to a company capable of supporting commercial activities. Graphite may not be successful in such a transition. If Graphite does not adequately address these risks and difficulties or successfully make such a transition, Graphite's business will suffer.

Graphite has never generated revenue from product sales, may never generate any revenue from product sales and may never become profitable.

Graphite's ability to generate revenue from product sales and achieve profitability, if ever, depends on its ability, alone or with collaborative partners, to initiate and successfully complete the development of, and obtain the regulatory approvals necessary to commercialize, any product candidates Graphite may identify for development. Graphite does not anticipate generating revenues from product sales for the next several years, if ever.

Even if one or more of the product candidates Graphite develops are approved for commercial sale, Graphite anticipates incurring significant costs associated with commercializing any approved product candidate. Graphite's expenses could increase beyond expectations if Graphite is required by the FDA, the European Medicines Agency ("EMA"), or other regulatory authorities to perform clinical and other studies in addition to those that Graphite currently anticipates. Even if Graphite is able to generate revenues from the sale of any approved product candidates, it may not become profitable and may need to obtain additional funding to continue operations.

Graphite will need substantial additional funding. If Graphite is unable to raise capital when needed on acceptable terms, or at all, it would be forced to delay, reduce, or terminate its research and product development programs, future commercialization efforts or other operations.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. Graphite's operations have consumed substantial amounts of cash since inception, and it expects its expenses to increase in connection with its ongoing activities, particularly as it identifies, continues the research and development of, initiates and conducts clinical trials of, and seeks marketing approval for, any product candidates Graphite may identify. In

addition, if Graphite obtains marketing approval for any product candidates, Graphite expects to incur significant commercialization expenses related to product sales, marketing, manufacturing, and distribution to the extent that such sales, marketing, manufacturing, and distribution are not the responsibility of a collaborator. Other unanticipated costs may also arise. Furthermore, Graphite expects to incur additional costs associated with operating as a public company. Accordingly, Graphite will need to obtain substantial additional funding in connection with Graphite's continuing operations. If Graphite is unable to raise capital when needed or on acceptable terms, it would be forced to delay, reduce, or eliminate its research and product development programs, future commercialization efforts or other operations.

As of September 30, 2023, Graphite's cash and cash equivalents and investments in marketable securities were $234.0 million. Graphite expects that these funds will enable it to fund its operating expenses and capital expenditure requirements for at least the next 12 months. However, its operating plan may change as a result of factors currently unknown to Graphite, and Graphite may need to seek funding sooner than planned. Graphite's future capital requirements will depend on many factors, including:

- the timing, scope, progress, results and costs of any product candidates that Graphite may identify and develop;
- the costs, timing, and outcome of regulatory review of the product candidates Graphite develops;
- the costs of continuing to build Graphite's gene editing platform;
- the timing, scope, progress, results, and costs of discovery, preclinical development and formulation development for the product candidates Graphite develops;
- the costs of preparing, filing, and prosecuting patent applications, establishing, maintaining and enforcing Graphite's intellectual property and proprietary rights, and defending intellectual property-related claims;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing, distribution, coverage and reimbursement for any product candidates for which Graphite receives regulatory approval;
- Graphite's ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- Graphite's ability to negotiate favorable terms in strategic alternatives including, but not limited to, any collaboration, licensing or other arrangements into which Graphite may enter in the future and performing Graphite's obligations in such collaborations;
- the success of any collaborations that Graphite may establish and of Graphite's license agreements;
- the continued effect of the COVID-19 pandemic on Graphite's business;
- the extent to which Graphite acquires or in-licenses product candidates, intellectual property and technologies; and
- the costs of operating as a public company.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive, and uncertain process that takes years to complete, and Graphite may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, Graphite's product candidates, if approved, may not achieve commercial success. Graphite's commercial revenues, if any, will be derived from sales of products that Graphite does not expect to be commercially available for many years, if at all. Accordingly, Graphite will need to continue to rely on additional financing to achieve Graphite's business objectives. Adequate additional financing may not be available to Graphite on acceptable terms, or at all. In addition, Graphite may seek additional capital due to favorable market conditions or strategic considerations even if it believes it has sufficient funds for its current or future operating plans.

Any additional fundraising efforts may divert Graphite's management from their day-to-day activities, which may adversely affect its ability to develop and commercialize any product candidates Graphite may identify. Graphite has no committed sources of additional capital and, if Graphite is unable to raise additional capital in sufficient amounts or on terms acceptable to Graphite, it may have to significantly delay, scale back or discontinue the development or commercialization of its product candidates or other research and development initiatives. Without sufficient funding, Graphite's license agreements and any future collaboration agreements may also be terminated if Graphite is unable to meet the payment or other obligations under such agreements.

Until such time, if ever, as Graphite can generate substantial product revenues, Graphite expects to finance its cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances, and licensing arrangements. To the extent that Graphite raises additional capital through the sale of equity or convertible debt securities, its stockholders' ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect its stockholders' rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting Graphite's ability to take specific actions, such as incurring additional debt, making capital expenditures, declaring dividends, and possibly other restrictions.

If Graphite raises funds through additional collaborations, strategic alliances, or licensing arrangements with third parties, it may have to relinquish valuable rights to its technologies, future revenue streams, research programs, or product candidates Graphite develops, or Graphite may have to grant licenses on terms that may not be favorable to it and/or that may reduce the value of Graphite's common stock. If Graphite is unable to raise additional funds through equity or debt financings when needed, Graphite may be required to delay, limit, reduce, or terminate its product development or future commercialization efforts or grant rights to develop and market product candidates that Graphite would otherwise prefer to develop and market ourselves.

Graphite may be subject to adverse legislative or regulatory tax changes that could adversely affect its business and financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect Graphite's stockholders or Graphite. Graphite cannot predict whether, when, in what form, or with what effective dates, tax laws, regulations and rulings may be enacted, promulgated or decided, which could result in an increase in Graphite's, or its stockholders', tax liability or require changes in the manner in which Graphite operates in order to minimize increases in its tax liability.

Graphite's ability to use its U.S. net operating loss carryforwards and certain other U.S. tax attributes may be limited.

As of December 31, 2022 and 2021, Graphite had U.S. federal net operating loss carryforwards of $75.7 million and $57.3 million, respectively (which are not subject to expiration), and state net operating loss carryforwards of $3.2 million and $29 thousand, respectively (which begin to expire in various amounts in 2039). Graphite's ability to use its U.S. federal and state net operating losses to offset potential future taxable income and reduce income taxes that would otherwise be due is dependent upon its generation of future taxable income, and Graphite cannot predict with certainty when, or whether, it will generate sufficient taxable income to use all of its net operating losses.

Under current law, unused U.S. federal net operating losses generated in taxable years beginning after December 31, 2017 are not subject to expiration and may be carried forward indefinitely. For taxable years beginning after December 31, 2020, however, the deductibility of such U.S. federal net operating losses is limited to 80% of Graphite's taxable income in such taxable years. In addition, both Graphite's current and future unused U.S. federal net operating losses and tax credits may be subject to limitation under Sections 382 and 383 of the Code if Graphite undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a rolling three-year period. Graphite may have

experienced such ownership changes in the past, and Graphite may experience ownership changes in the future as a result of its equity offerings or subsequent shifts in its stock ownership, some of which are outside Graphite's control. Graphite's net operating losses and tax credits may also be impaired or restricted under state law.

Graphite faces risks related to health epidemics, pandemics and other widespread outbreaks of contagious disease, including the COVID-19 pandemic, which could significantly disrupt Graphite's operations, impact its financial results or otherwise adversely impact Graphite's business.

Significant outbreaks of contagious diseases, and other adverse public health developments, could have a material impact on Graphite's business operations and operating results. The continued effects of COVID-19 have affected segments of the global economy as well as Graphite's operations. For example, COVID-19 impacted clinical trial site resourcing, staffing and operations, resulting in longer timeframes than initially anticipated for participant screening and enrollment. In particular, treatment of the first patient in Graphite's Phase 1/2 clinical trial of nula-cel was delayed due to screen failure as a result of a prospective participant
becoming infected with COVID-19. As a result of the COVID-19 pandemic or similar public health crises that may arise, Graphite may experience further disruptions that could adversely impact its operations, research and development, including preclinical studies, clinical trials and manufacturing activities, including:

- delays or disruptions in any clinical trials that Graphite may conduct, including patient screening, patient enrollment, patient dosing, clinical trial site activation, and study monitoring;
- delays or disruptions in preclinical experiments and IND-enabling and clinical trial application-enabling studies due to restrictions related to Graphite staff being on site;
- interruption or delays in the operations of the FDA, the EMA and comparable foreign regulatory agencies;
- interruption of, or delays in, receiving, supplies of drug substance and drug product from Graphite's contract manufacturing organizations ("CMOs") or delays or disruptions in Graphite's pre-clinical experiments or clinical trials performed by CROs due to staffing shortages, production and research slowdowns or stoppages and disruptions in delivery systems or research;
- limitations imposed on Graphite's business operations by local, state, or federal authorities to address such pandemics or similar public health crises could impact Graphite's ability to conduct preclinical or clinical activities, including conducting IND-enabling studies or Graphite's ability to select future development candidates;
- the impact of the COVID-19 pandemic on Graphite's corporate culture; and
- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, staffing shortages, travel limitations, cyber security and data accessibility, or communication or mass transit disruptions, any of which could adversely impact Graphite's business operations or delay necessary interactions with local regulators, ethics committees, manufacturing sites, research or clinical trial sites and other important agencies and contractors.

The trading prices for biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic, and Graphite may face similar volatility in its stock price.

Graphite cannot predict the scope and severity of any potential business shutdowns or disruptions. If Graphite or any of the third parties with whom Graphite engages were to experience shutdowns or other business disruptions, Graphite's ability to conduct its business in the manner and on the timelines presently planned could be materially and negatively affected, which could have a material adverse impact on Graphite's business, financial condition, Graphite's results of operations and prospects.

Risks Related to Graphite's Business if Merger is not Consummated

Graphite may not be successful in completing the merger or any strategic transactions that it may consummate in the future could have negative consequences.

Graphite is exploring and evaluating strategic transactions, including a merger, reverse merger, sale, wind-down, liquidation and dissolution or other strategic transaction. However, there can be no assurance that Graphite will be able to successfully consummate any particular strategic transaction. The process of continuing to evaluate these strategic options may be very costly, time-consuming and complex and Graphite has incurred, and Graphite may in the future incur, significant costs related to this continued evaluation, such as legal and accounting fees and expenses and other related charges. Graphite may also incur additional unanticipated expenses in connection with this process. A considerable portion of these costs will be incurred regardless of whether any such course of action is implemented or transaction is completed. Any such expenses will decrease the remaining cash available for use in Graphite's business and may diminish or delay any future distributions to Graphite's stockholders.

In addition, any strategic business combination or other transactions that Graphite may consummate in the future could have a variety of negative consequences and Graphite may implement a course of action or consummate a transaction that yields unexpected results that adversely affects Graphite's business and decreases the remaining cash available for use in its business or the execution of its strategic plan. There can be no assurances that any particular course of action, business arrangement or transaction, or series of transactions, will be pursued, successfully consummated, lead to increased stockholder value, or achieve the anticipated results. Any failure of such potential transaction to achieve the anticipated results could significantly impair Graphite's ability to enter into any future strategic transactions and may significantly diminish or delay any future distributions to Graphite's stockholders.

If Graphite is successful in completing the merger, Graphite may be exposed to other operational and financial risks.

The consummation of the merger or any other strategic transaction will require significant time on the part of Graphite's management, and the diversion of management's attention may disrupt Graphite's business. The negotiation and consummation of any such transaction may also require more time or greater cash resources than Graphite anticipates and expose Graphite to other operational and financial risks, including:

- increased near-term and long-term expenditures;
- exposure to unknown liabilities;
- higher than expected acquisition or integration costs;
- incurrence of substantial debt or dilutive issuances of equity securities to fund future operations;
- write-downs of assets or goodwill or incurrence of non-recurring, impairment or other charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired business with Graphite's operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired business due to changes in management and ownership;
- inability to retain key employees of Graphite or any acquired business; and
- possibility of future litigation.

Any of the foregoing risks could have a material adverse effect on Graphite's business, financial condition and prospects.

If the merger is not consummated, Graphite's board of directors may decide to pursue a dissolution and liquidation. In such an event, the amount of cash available for distribution to its stockholders will depend heavily on the timing of such liquidation as well as the amount of cash that will need to be reserved for commitments and contingent liabilities.

There can be no assurance that the merger will be completed. If the merger is not completed, Graphite's board may decide to pursue a dissolution and liquidation. In such an event, the amount of cash available for distribution to its stockholders will depend heavily on the timing of such decision and, as with the passage of time the amount of cash available for distribution will be reduced as Graphite continues to fund its operations. In addition, if Graphite's board were to approve and recommend, and Graphite's stockholders were to approve, a dissolution and liquidation, Graphite would be required under Delaware corporate law to pay its outstanding obligations, as well as to make reasonable provision for contingent and unknown obligations, prior to making any distributions in liquidation to its stockholders. As a result of this requirement, a portion of Graphite's assets may need to be reserved pending the resolution of such obligations and the timing of any such resolution is uncertain. In addition, Graphite may be subject to litigation or other claims related to a dissolution and liquidation. If a dissolution and liquidation were pursued, Graphite's board, in consultation with its advisors, would need to evaluate these matters and make a determination about a reasonable amount to reserve. Accordingly, holders of Graphite's common stock could lose all or a significant portion of their investment in the event of a liquidation, dissolution or winding up.

Graphite's ability to consummate the merger depends on its ability to retain its employees required to consummate such transaction.

Graphite's ability to consummate the merger depends upon its ability to retain its employees required to consummate such a transaction, the loss of whose services may adversely impact the ability to consummate such transaction. In February 2023 and again in August 2023, Graphite undertook an organizational restructuring that significantly reduced its workforce in order to conserve its capital resources. Graphite's cash conservation activities may yield unintended consequences, such as attrition beyond its planned reduction in workforce and reduced employee morale, which may cause remaining employees to seek alternative employment. Graphite's ability to successfully complete the merger depends in large part on its ability to retain certain of its remaining personnel. If Graphite is unable to successfully retain its remaining personnel, Graphite is at risk of a disruption to its exploration and consummation of the merger as well as business operations.

Graphite's corporate restructuring and the associated headcount reduction may not result in anticipated savings, could result in total costs and expenses that are greater than expected, and could disrupt its business.

In February 2023 and August 2023, Graphite undertook an organizational restructuring that significantly reduced its workforce, including the departure of its chief business officer and chief scientific officer. Graphite may not realize, in full or in part, the anticipated benefits, savings and improvements in its cost structure from its restructuring efforts due to unforeseen difficulties, delays or unexpected costs. If Graphite is unable to realize the expected operational efficiencies and cost savings from the restructuring, its operating results and financial condition would be adversely affected. Furthermore, Graphite's restructuring plan may be disruptive to its operations. For example, its headcount reductions could yield unanticipated consequences, such as increased difficulties in implementing its business strategy, including retention of its remaining employees. Employee litigation related to the headcount reduction could be costly and prevent management from fully concentrating on the business.

Any future growth would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Graphite may not be able to effectively manage Graphite's operations or recruit and retain qualified personnel, which may result in weaknesses in its infrastructure and operations, risks that Graphite may not be able to comply with legal and regulatory requirements, and loss of employees and reduced productivity among remaining employees. For example, the workforce reduction may negatively impact its clinical, regulatory, technical operations, and commercial functions, should Graphite choose to continue to pursue them, which would have a negative impact on its ability to successfully develop, and ultimately, commercialize its product candidates. Graphite's future financial

performance and its ability to develop its product candidates or additional assets will depend, in part, on its ability to effectively manage any future growth or restructuring, as the case may be. In addition, given the substantial restructuring of its operations, it may be difficult to evaluate its current business and future prospects on the basis of historical operating performance.

Graphite may become involved in securities class action litigation that could divert management's attention and harm the company's business, and insurance coverage may not be sufficient to cover all costs and damages.

In the past, securities class action litigation has often followed certain significant business transactions, such as the sale of a company or announcement of any other strategic transaction, or the announcement of negative events, such as negative results from clinical trials. These events may also result in investigations by the SEC. Graphite may be exposed to such litigation or investigation even if no wrongdoing occurred. Litigation and investigations are usually expensive and divert management's attention and resources, which could adversely affect its business and cash resources and its ability to consummate a potential strategic transaction or the ultimate value its stockholders receive in any such transaction.

Risks Related to Graphite's Discovery, Development, and Commercialization

Graphite may not be successful in its efforts to identify and develop potential product candidates. If these efforts are unsuccessful, it may never become a commercial stage company or generate any revenues.

The success of Graphite's business depends primarily upon its ability to identify, develop, and commercialize product candidates. Graphite's research programs may fail to identify potential product candidates for clinical development for a number of reasons: its research methodology may be unsuccessful in identifying potential product candidates; its potential product candidates may be shown to have harmful side effects in preclinical in vitro experiments or animal model studies; they may not show promising signals of therapeutic effect in such experiments or studies; or they may have other characteristics that may make the product candidates impractical to manufacture, unmarketable, or unlikely to receive marketing approval.

If any of these events occur, Graphite may be forced to abandon its research or development efforts for a program or programs, which would have a material adverse effect on its business, financial condition, results of operations, and prospects and could potentially cause Graphite to cease operations. For instance, in February 2023, Graphite announced that it had discontinued development of its lead program, and subsequently announced that it had discontinued development of all its development programs. Research programs to identify new product candidates require substantial technical, financial, and human resources. Graphite may focus its efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful, which would be costly and time-consuming.

Even if Graphite completes the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time-consuming, and uncertain and may prevent Graphite from obtaining approvals for the commercialization of its product candidates. If Graphite is not able to obtain, or if there are delays in obtaining, required regulatory approvals, it will not be able to commercialize, or will be delayed in commercializing, product candidates it develops, and its ability to generate revenue will be materially impaired.

Any product candidates Graphite develops and the activities associated with their development and commercialization, including their design, testing, manufacture, recordkeeping, labeling, storage, approval, advertising, promotion, sale, import, export, and distribution, are subject to comprehensive regulation by the FDA, the EMA and other regulatory authorities in the United States and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent Graphite from commercializing the product candidate in a given jurisdiction. Graphite has not received approval to market any product candidates from regulatory authorities in any jurisdiction. Graphite has only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third parties to assist Graphite in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to

establish the biological product candidate's safety, purity, and potency. Securing regulatory approval also requires the submission of extensive information about the product manufacturing process, and inspection of manufacturing facilities by, the relevant regulatory authority. Graphite's product candidates may not be effective, may be only moderately effective, or may prove to have undesirable or unintended side effects, toxicities, or other characteristics that may preclude its obtaining marketing approval or prevent or limit commercial use.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive, may take many years if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that Graphite's data is insufficient for approval and require additional preclinical, clinical, or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit, or prevent marketing approval of a product candidate. Any marketing approval Graphite ultimately obtains may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If Graphite experiences delays in obtaining approval or if it fails to obtain approval of its product candidates, the commercial prospects for those product candidates may be harmed, and its ability to generate revenues will be materially impaired.

Graphite may expend its limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because Graphite has limited financial and managerial resources, it focuses on research programs and product candidates that it identifies for specific indications among many potential options. As a result, it may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Graphite's resource allocation decisions may cause it to fail to capitalize on viable commercial products or profitable market opportunities. Graphite's spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If Graphite does not accurately evaluate the commercial potential or target market for a particular product candidate, it may relinquish valuable rights to that product candidate through collaboration, licensing, or other royalty arrangements in cases in which it would have been more advantageous for Graphite to retain sole development and commercialization rights to such product candidate. Any such event could have a material adverse effect on its business, financial condition, results of operations, and prospects.

Even if Graphite completes the necessary clinical trials, it cannot predict when, or if, it will obtain regulatory approval to commercialize a product candidate Graphite may develop in the United States or any other jurisdiction, and any such approval may be for a more narrow indication than it seeks.

Graphite cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Even if its product candidates meet their safety and efficacy endpoints in clinical trials, the regulatory authorities may not complete their review processes in a timely manner, or Graphite may not be able to obtain regulatory approval. Additional delays may result if an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. In addition, Graphite may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory authority policy during the period of product development, clinical trials, and the review process.

Regulatory authorities also may approve a product candidate for more limited indications than requested or they may impose significant limitations in the form of narrow indications, warnings or a REMS. These regulatory authorities may require labeling that includes precautions or contraindications with respect to conditions of use,

or they may grant approval subject to the performance of costly post-marketing clinical trials. In addition, regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of its product candidates. Any of the foregoing scenarios could materially harm the commercial prospects for its product candidates and materially adversely affect its business, financial condition, results of operations, and prospects.

Marketing approval by the FDA in the United States, if obtained, does not ensure approval by regulatory authorities in other countries or jurisdictions. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country. Approval processes vary among countries and can involve additional product candidate testing and validation and additional administrative review periods. Seeking regulatory approval outside the United States could result in difficulties and costs for Graphite and require additional preclinical studies or clinical trials which could be costly and time-consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of its product candidates in those countries. The foreign regulatory approval process involves all of the risks associated with FDA approval. Graphite does not have any product candidates approved for sale in any jurisdiction, including international markets, and Graphite does not have experience in obtaining regulatory approval in international markets. If Graphite fails to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, its target market will be reduced and its ability to realize the full market potential of its product candidates will be unrealized.

Graphite's product candidates may fail to achieve the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community necessary for commercial success.

The commercial success of any of Graphite's product candidates will depend upon its degree of market acceptance by physicians, patients, third-party payors, and others in the medical community. Ethical, social, and legal concerns about genetic medicines generally and gene editing technologies specifically could result in additional regulations restricting or prohibiting the marketing of its product candidates. Even if its product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors, and others in the medical community. The degree of market acceptance of its product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in clinical trials;
- the potential and perceived advantages compared to alternative treatments;
- the limitation to Graphite's targeted patient population and limitations or warnings contained in approved labeling by the FDA or other regulatory authorities;
- the ability to offer its products for sale at cost-effective or competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the clinical indications for which the product candidate is approved by the FDA, the EMA, or other regulatory agencies;
- public attitudes regarding genetic medicine generally and gene editing technologies specifically;
- the willingness of the target patient population to try novel therapies and of physicians to prescribe these therapies, as well as their willingness to accept a therapeutic intervention that involves the editing of the patient's gene;
- product labeling or product insert requirements of the FDA, the EMA, or other regulatory authorities,
- including any limitations or warnings contained in a product's approved labeling;
- relative convenience and ease of administration;
- the timing of market introduction of competitive products;
- publicity concerning its products or competing products and treatments;

- the strength and effectiveness of sales, marketing and distribution efforts;
- sufficient third-party coverage and adequate reimbursement, including the ability to supply product that is cost-effective and acceptable to the pricing or reimbursement authorities in different countries; and
- the prevalence and severity of any side effects.

Even if any of its product candidates obtain regulatory approval, such products may not achieve an adequate level of acceptance, Graphite may not generate or derive sufficient product revenues, and Graphite may not become profitable.

Graphite faces significant competition in an environment of rapid technological change, and there is a possibility that its competitors may achieve regulatory approval before it or develop therapies that are safer, less expensive or more advanced or effective than Graphite, which may harm its financial condition and its ability to successfully market or commercialize its product candidates.

The development and commercialization of new drug products is highly competitive. Moreover, the gene editing field is characterized by rapidly changing technologies, significant competition, and a strong emphasis on intellectual property. Graphite will face competition with respect to any product candidates that it may develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which Graphite has research programs. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to its approach, and others are based on entirely different approaches.

There are several other companies advancing gene editing and gene editing and gene therapy product candidates in preclinical or clinical development in sickle cell disease, including Beam Therapeutics Inc., bluebird bio, Inc., Cellectis SA, CRISPR Therapeutics AG, Editas Medicine, Inc., Intellia Therapeutics, Inc., and Sangamo Therapeutics, Inc. Companies advancing gene therapy programs in beta-thalassemia include bluebird bio, Inc., CRISPR Therapeutics AG, Sangamo Therapeutics, Inc. and Edigene Inc. Companies advancing gene therapy programs in XSCID include Mustang Bio, Inc. Companies advancing gene therapy programs in Gaucher Disease include AVROBio, Inc. and Freeline Therapeutics Holdings plc. Companies advancing gene editing and gene therapy programs in preclinical development for AAT deficiency include Beam Therapeutics Inc., Editas Medicine, Inc., Intellia Therapeutics, Inc., Krystal Biotech Inc., Apic Bio Inc., and LogicBio Therapeutics Inc. Companies combining CRISPR with HDR (homology directed repair) include CRISPR Therapeutics AG, which, for oncology applications, inserts a chimeric antigen receptor (“CAR”) construct into the TCR alpha constant (TRAC) locus in T-cells using HDR. Additionally, an academic collaboration between the University of California, San Francisco and the University of California, Los Angeles is seeking to correct the sickle cell mutation using CRISPR followed by delivery of a single-stranded oligonucleotide DNA donor to potentially harness HDR.

Any product candidates that Graphite successfully develops and commercializes will compete with existing therapies and new therapies that may become available in the future that are approved to treat the same diseases for which Graphite may obtain approval for its product candidates. This may include other types of therapies, such as small molecule, antibody, and/or protein therapies.

Many of Graphite’s current or potential competitors, either alone or with their collaboration partners, may have significantly greater financial resources and expertise than it does in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products. Mergers and acquisitions in the pharmaceutical, biotechnology, and gene therapy industries may result in even more resources being concentrated among a smaller number of Graphite’s competitors.

Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with Graphite in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, Graphite's programs. Graphite's commercial opportunity could be reduced or eliminated if its competitors develop and commercialize product candidates that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any product candidates that Graphite may develop or that would render any product candidates that Graphite may develop obsolete or non-competitive. Graphite's competitors also may obtain FDA or other regulatory approval for their product candidates more rapidly than Graphite may obtain approval for its product candidates, which could result in its competitors establishing a strong market position before Graphite is able to enter the market. Additionally, technologies developed by Graphite's competitors may render Graphite's potential product candidates uneconomical or obsolete, and Graphite may not be successful in marketing its product candidates against competitors.

In addition, as a result of the expiration or successful challenge of Graphite's patent rights, Graphite could face more litigation with respect to the validity and/or scope of patents relating to its competitors' products. The availability of Graphite's competitors' products could limit the demand, and the price Graphite is able to charge, for any product candidates that Graphite may develop and commercialize.

If, in the future, Graphite is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market its product candidates, Graphite may not be successful in commercializing those product candidates if and when they are approved.

Graphite does not have a sales or marketing infrastructure and have limited experience in the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any approved products for which Graphite retains sales and marketing responsibilities, it must either develop a sales and marketing organization or outsource these functions to third parties. In the future, Graphite may choose to build a focused sales, marketing, and commercial support infrastructure to sell, or participate in sales activities with its collaborators for, some of its product candidates if and when they are approved.

There are risks involved with both establishing Graphite's own commercial capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force or reimbursement specialists is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which Graphite recruits a sales force and establish marketing and other commercialization capabilities is delayed or does not occur for any reason, Graphite would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and its investment would be lost if Graphite cannot retain or reposition its commercialization personnel.

Factors that may inhibit Graphite's efforts to commercialize its product candidates on its own include:

- Graphite's inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or educate adequate numbers of physicians on the benefits of prescribing any future products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- restricted or closed distribution channels that make it difficult to distribute its product candidates to segments of the patient population;
- the lack of complementary products to be offered by sales personnel, which may put Graphite at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If Graphite enters into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, its product revenues or the profitability of these product revenues to Graphite may be lower than if Graphite was to market and sell any products it may develop itself. In addition, Graphite may not be successful in entering into arrangements with third parties to commercialize its product candidates or may be unable to do so on terms that are favorable to it. Graphite may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market Graphite's products effectively. If Graphite does not establish commercialization capabilities successfully, either on its own or in collaboration with third parties, Graphite will not be successful in commercializing its product candidates.

Adverse public perception of genetic medicines and gene editing in particular, may negatively impact regulatory approval of, and/or demand for, Graphite's potential products, if approved.

Graphite's potential therapeutic products historically involved editing the human genome. The clinical and commercial success of its potential products will depend in part on public understanding and acceptance of the use of gene editing therapy for the prevention or treatment of human diseases. Public perception and related media coverage of potential gene therapy-related efficacy or safety issues, including adoption of new therapeutics or novel approaches to treatment, as well as ethical concerns related specifically to gene editing, may adversely influence the willingness of subjects to participate in clinical trials, or if any therapeutic is approved, of physicians and patients to accept these novel and personalized treatments. Physicians, health care providers and third-party payors often are slow to adopt new products, technologies and treatment practices, particularly those that may also require additional upfront costs and training. Physicians may not be willing to undergo training to adopt these novel and potentially personalized therapies, may decide the particular therapy is too complex or potentially risky to adopt without appropriate training, and may choose not to administer the therapy. Further, due to health conditions, genetic profile or other reasons, certain patients may not be candidates for the therapies.

In addition, responses by federal and state agencies, congressional committees and foreign governments to negative public perception, ethical concerns or financial considerations may result in new legislation, regulations, or medical standards, such as stricter labeling requirements, that could limit Graphite's ability to develop or commercialize any product candidates, obtain or maintain regulatory approval or otherwise achieve profitability. New government requirements may be established that could delay or prevent regulatory approval of its product candidates under development. It is impossible to predict whether legislative changes will be enacted, regulations, policies or guidance changed, or interpretations by agencies or courts changed, or what the impact of such changes, if any, may be. Based on these and other factors, health care providers and payors may decide that the benefits of these new therapies do not or will not outweigh their costs.

More restrictive government regulations or negative public opinion would have a negative effect on Graphite's business or financial condition and may delay or impair its development and commercialization of product candidates or demand for its product candidates. Adverse events in its preclinical studies or clinical trials or those of its competitors or of academic researchers utilizing gene editing technologies, even if not ultimately attributable to product candidates Graphite identifies and develops, and the resulting publicity could result in increased governmental regulation, unfavorable public perception, potential regulatory delays in the testing or approval of potential product candidates Graphite identifies and develops, stricter labeling requirements for those product candidates that are approved, and a decrease in demand for any such product candidates. Use of gene editing technology by a third party or government to develop biological agents or products that threaten U.S. national security could similarly result in such negative impacts to Graphite.

Due to the novel nature of Graphite's technology and the potential for its product candidates to offer therapeutic benefit in a single administration or limited number of administrations, Graphite faces uncertainty related to pricing and reimbursement for these product candidates. Likewise, even if it is able to commercialize any product candidates, such products may become subject to unfavorable pricing regulations, third-party reimbursement practices, or healthcare reform initiatives, which would harm its business.

The regulations that govern marketing approvals, pricing, and reimbursement for new products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed.

In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, Graphite might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay or might even prevent Graphite's commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues Graphite is able to generate from the sale of the product in that country. Adverse pricing limitations may hinder its ability to recoup its investment in one or more product candidates Graphite develops, even if any of its product candidates obtain marketing approval. See the section titled "*Graphite's Business—Government Regulation—Pharmaceutical Coverage, Pricing and Reimbursement.*"

In the United States, no uniform policy exists for coverage and reimbursement for products among third-party payors. Therefore, decisions regarding the extent of coverage and amount of reimbursement to be provided can differ significantly from payor to payor. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate a payor will pay for the product. One third-party payor's decision to cover a particular product or service does not ensure that other payors will also provide coverage for the medical product or service. Third-party payors may limit coverage to specific products on an approved list or formulary, which may not include all FDA-approved products for a particular indication.

Graphite expects the cost of a single administration of a gene editing therapy, such as those Graphite has historically sought to develop, to be substantial, when and if they achieve regulatory approval. Coverage and reimbursement by government and private payors will be essential for most patients to be able to afford these treatments. Accordingly, sales of any such product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of any of its product candidates will be paid by government authorities, private health plans, and other third-party payors. Payors may not be willing to pay high prices for a single administration. Coverage and reimbursement by a third-party payor may depend upon several factors, including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective, and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Graphite cannot be sure that reimbursement will be available for any products that it commercializes and, if reimbursement is available, that the level of reimbursement will be adequate. Reimbursement may impact the demand for, or the price of, any product candidate for which Graphite obtains marketing approval. If reimbursement is not available or is available only to limited levels, Graphite may not be able to successfully commercialize any product candidate for which Graphite obtains marketing approval. Obtaining coverage and reimbursement for a product from third-party payors is a time-consuming and costly process that could require Graphite to provide to the payor supporting scientific, clinical, and cost-effectiveness data. There is significant uncertainty related to third-party coverage and reimbursement of newly approved products. Graphite may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. If coverage and reimbursement are not available, or are available only at limited levels, Graphite may not be able to successfully commercialize any of its product candidates. Even if coverage is provided, the approved reimbursement amount may not be adequate to realize a sufficient return on its investment.

Graphite's initial target patient populations are relatively small, as a result of which the pricing and reimbursement of any of its product candidates, if approved, must be adequate to support the necessary commercial infrastructure. If Graphite is unable to obtain adequate levels of reimbursement, its ability to successfully market and sell any such product candidates will be adversely affected. The manner and level at which reimbursement is provided for services related to any product candidates Graphite develops (e.g., for administration of Graphite's product candidate to patients) is also important. Inadequate reimbursement for such

services may lead to physician and payor resistance and adversely affect its ability to market or sell its product candidates. In addition, Graphite may need to develop new reimbursement models in order to realize adequate value. Payors may not be able or willing to adopt such new models, and patients may be unable to afford that portion of the cost that such models may require them to bear. If Graphite determines such new models are necessary but is unsuccessful in developing them, or if such models are not adopted by payors, its business, financial condition, results of operations, and prospects could be adversely affected.

There may be significant delays in obtaining reimbursement for newly approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA, the EMA or other regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers Graphite's costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover Graphite's costs and may not be made permanent. Reimbursement rates may vary according to the use of the product and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost products and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States. Graphite's inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products Graphite may develop could have a material adverse effect on Graphite's operating results, its ability to raise capital needed to commercialize products, and its overall financial condition.

If the market opportunities for any product candidates Graphite may develop are smaller than it believes they are, its potential revenues may be adversely affected, and its business may suffer. Because the target patient populations for many of its product candidates are small, Graphite must be able to successfully identify patients and achieve a significant market share to maintain profitability and growth.

Graphite has focused its research and product development on treatments for rare genetically defined diseases. Its historical product candidates were expected to target a single mutation; as a result, the relevant patient population may therefore be small. Its projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with its product candidates, are based on estimates. These estimates may prove to be incorrect and new studies may change the estimated incidence or prevalence of these diseases. The number of patients in the United States, Europe, and elsewhere may turn out to be lower than expected, and patients may not be amenable to treatment with its product candidates, or may become increasingly difficult to identify or gain access to, all of which would adversely affect Graphite's business, financial condition, results of operations, and prospects. Additionally, because of the potential that any product candidates Graphite develops could cure a target disease, Graphite may not receive recurring revenues from patients and may deplete the patient population prevalence through curative therapy.

Genetic medicines are novel, and any product candidates Graphite develops may be complex and difficult to manufacture. Graphite could experience delays in complying with regulatory requirements or production problems that result in delays in Graphite's development or commercialization programs, limit the supply of its product candidates, or otherwise harm its business.

Graphite's product candidates will likely require processing steps that are more complex than those required for most chemical pharmaceuticals. Moreover, unlike chemical pharmaceuticals, the physical and chemical properties of a biologic, such as the product candidates Graphite is has historically developed generally cannot be fully characterized. As a result, assays of the finished product candidate may not be sufficient to ensure that the product candidate will perform in the intended manner. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in unusable products, product recalls, product liability claims, insufficient inventory, or potentially delay progression of Graphite's potential IND filings. Graphite may also encounter problems achieving adequate quantities and quality of clinical-grade materials that meet FDA, EMA or other comparable applicable foreign

standards or specifications with consistent and acceptable production yields and costs. For example, the current approach of manufacturing AAV vectors may fall short of supplying required number of doses needed for advanced stages of pre-clinical studies or clinical trials, and the FDA may ask Graphite to demonstrate that Graphite has the appropriate manufacturing processes in place to support the higher-dose group in Graphite's future pre-clinical studies or clinical trials.

In addition, the FDA, the EMA, and other regulatory authorities may require Graphite to submit samples of any of the approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, the EMA, or other regulatory authorities may require that Graphite not distribute a sample until the agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in product recalls. Product recalls could cause Graphite to delay clinical trials or product launches, which could be costly and otherwise harm its business, financial condition, results of operations, and prospects.

Graphite also may encounter problems hiring and retaining the experienced scientific, quality control, and manufacturing personnel needed to manage its manufacturing process, which could result in delays in its production or difficulties in maintaining compliance with applicable regulatory requirements.

Given the nature of biologics manufacturing, including for AAV vectors, there is a risk of contamination during manufacturing. Any contamination could materially harm its ability to produce product candidates on schedule and could harm its results of operations and cause reputational damage. Some of the raw materials that Graphite anticipates will be required in its manufacturing process are derived from biologic sources. Such raw materials are difficult to procure and may be subject to contamination or recall. A material shortage, contamination, recall, or restriction on the use of biologically derived substances in the manufacture of its current or future product candidates could adversely impact or disrupt the commercial manufacturing or the production of clinical material, which could materially harm its development timelines and its business, financial condition, results of operations, and prospects.

Any problems in Graphite's manufacturing process or the facilities with which it contracts could make it a less attractive collaborator for potential partners, including larger pharmaceutical companies and academic research institutions, which could limit its access to additional attractive development programs.

Product liability lawsuits against Graphite could cause it to incur substantial liabilities and could limit commercialization of its product candidates.

Graphite faces an inherent risk of product liability exposure related to the testing in human clinical trials of its product candidates and will face an even greater risk if Graphite commercially sells any products it develops. If Graphite cannot successfully defend itself against claims that its product candidates caused injuries, it could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any of its current or future product candidates;
- injury to its reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant time and costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize Graphite's product candidates.

Although Graphite maintains product liability insurance coverage, it may not be adequate to cover all liabilities that it may incur. Graphite anticipates that it will need to increase its insurance coverage when it begins clinical trials and if it successfully commercializes any products. Insurance coverage is increasingly expensive. Graphite may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Graphite's relationships with healthcare providers, physicians, and third-party payors will be subject to applicable anti-kickback, fraud and abuse, anti-bribery and other healthcare laws and regulations, which could expose it to criminal sanctions, civil penalties, contractual damages, reputational harm, and diminished profits and future earnings.

Healthcare providers, including physicians, and third-party payors play a primary role in the recommendation and prescription of any product candidates that Graphite may develop for which it obtains marketing approval. Graphite's current and future arrangements with third-party payors, healthcare providers and customers may expose it to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which Graphite markets, sells, and distributes its products for which Graphite obtains marketing approval. See the section titled "*Graphite's Business—Government Regulation—Government Other U.S. Healthcare Laws and Compliance Requirements*."

Efforts to ensure that Graphite's business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Given the breadth of the laws and regulations, limited guidance for certain laws and regulations and evolving government interpretations of the laws and regulations, governmental authorities may possibly conclude that Graphite's business practices may not comply with healthcare laws and regulations. If Graphite's operations are found to be in violation of any of the laws described above or any other government regulations that apply to it, Graphite may be subject to significant penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, exclusion from participation in government health care programs, such as Medicare and Medicaid, individual imprisonment, injunctions, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow Graphite to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect Graphite's business, financial condition, results of operations, and prospects.

Healthcare and other reform legislation may increase the difficulty and cost for Graphite and any collaborators it may have to obtain marketing approval of and commercialize Graphite's product candidates and affect the prices Graphite, or its collaborators, may obtain.

In the United States and some foreign jurisdictions, there have been and continue to be ongoing efforts to implement legislative and regulatory changes regarding the healthcare system. Such changes could prevent or delay marketing approval of any product candidates that Graphite may develop, restrict or regulate post-approval activities, and affect Graphite's ability to profitably sell any product candidates for which it obtains marketing approval. Although Graphite cannot predict what healthcare or other reform efforts will be successful, such efforts may result in more rigorous coverage criteria, in additional downward pressure on the price that Graphite, or its future collaborators, may receive for any approved products or in other consequences that may adversely affect Graphite's ability to achieve or maintain profitability. See the section titled "*Graphite's Business—Government Regulation—Healthcare Reform*."

The continuing efforts of the government, insurance companies, managed care organizations and other payers of healthcare services to contain or reduce costs of healthcare may adversely affect:

- the demand for any of Graphite's product candidates, if approved;
- the ability to set a price that Graphite believes is fair for any of its product candidates, if approved;
- Graphite's ability to generate revenues and achieve or maintain profitability;
- the level of taxes that Graphite is required to pay; and
- the availability of capital.

Within the United States, the federal government and individual states have aggressively pursued healthcare reform, as evidenced by the passing of the ACA and the ongoing efforts to modify or repeal that legislation. The ACA substantially changed the way healthcare is financed by both governmental and private insurers and

contains a number of provisions that affect coverage and reimbursement of drug products and/or that could potentially reduce the demand for pharmaceutical products such as increasing drug rebates under state Medicaid programs for brand name prescription drugs and extending those rebates to Medicaid managed care and assessing a fee on manufacturers and importers of brand name prescription drugs reimbursed under certain government programs, including Medicare and Medicaid. Other aspects of healthcare reform, such as expanded government enforcement authority and heightened standards that could increase compliance-related costs, could also affect our business. Modifications have been implemented under the previous presidential administration and additional modifications or repeal may occur.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for Graphite's product candidates. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs.

Graphite expects that the healthcare reform measures that have been adopted and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent Graphite from being able to generate revenue, attain profitability or commercialize Graphite's products.

If Graphite or any contract manufacturers and suppliers it engages fail to comply with environmental, health, and safety laws and regulations, Graphite could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of its business.

Graphite and any contract manufacturers and suppliers it engages are subject to numerous federal, state, and local environmental, health, and safety laws, regulations, and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment, and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air, and water; and employee health and safety. Graphite's operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Its operations also produce hazardous waste. Graphite generally contracts with third parties for the disposal of these materials and wastes. Graphite cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from its use of hazardous materials, Graphite could be held liable for any resulting damages, and any liability could exceed its resources. Under certain environmental laws, Graphite could be held responsible for costs relating to any contamination at its current or past facilities and at third-party facilities. Graphite also could incur significant costs associated with civil or criminal fines and penalties.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair its research and product development efforts. In addition, Graphite cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although Graphite maintains workers' compensation insurance to cover for costs and expenses it may incur due to injuries to its employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. Graphite does not carry specific biological or hazardous waste insurance coverage, and its property, casualty, and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, Graphite could be held liable for damages or be penalized with fines in an amount exceeding its resources, and its clinical trials or regulatory approvals could be suspended, which could have a material adverse effect on its business, financial condition, results of operations, and prospects.

In addition, Graphite may incur substantial costs in order to comply with current or future environmental, health, and safety laws, regulations, and permitting requirements. These current or future laws, regulations, and permitting requirements may impair its research, development, or production efforts. Failure to comply with these laws, regulations, and permitting requirements also may result in substantial fines, penalties, or other sanctions or business disruption, which could have a material adverse effect on its business, financial condition, results of operations, and prospects.

Any third-party contract manufacturers and suppliers Graphite engages will also be subject to these and other environmental, health, and safety laws and regulations. Liabilities they incur pursuant to these laws and regulations could result in significant costs or an interruption in operations, which could have a material adverse effect on Graphite's business, financial condition, results of operations, and prospects.

Risks Related to Graphite's Intellectual Property

If Graphite is unable to obtain and maintain patent and other intellectual property protection for any product candidates it develops and for its platform technology, or if the scope of the patent and other intellectual property protection obtained is not sufficiently broad, its competitors could develop and commercialize products and technology similar or identical to Graphite, and its ability to successfully commercialize its product candidates, and its platform technology may be adversely affected.

Graphite's commercial success depends in large part on its ability to obtain and maintain patent, trademark, trade secret and other intellectual property protection of its platform technology, product candidates and other technology, methods used to manufacture them and methods of treatment, as well as successfully defending its patent and other intellectual property rights against third-party challenges. It is difficult and costly to protect Graphite's platform technology and product candidates, and it may not be able to ensure their protection. Graphite's ability to stop unauthorized third parties from making, using, selling, offering to sell, importing or otherwise commercializing its product candidates is dependent upon the extent to which Graphite has rights under valid and enforceable patents or trade secrets that cover these activities. In February 2023, Graphite announced that it had discontinued development of its lead program and subsequently announced that it had discontinued development of all its development programs, and Graphite does not intend to continue to seek or maintain intellectual property protection on the technology underlying these programs. In addition, Graphite has sold or intends to sell in the future certain intellectual property rights to one or more third parties, and any intellectual property rights sold in the manner will no longer provide benefit or protection to Graphite.

Graphite has historically sought to protect its proprietary position by in-licensing intellectual property relating to its platform technology and filing patent applications in the United States and abroad related to its platform technology and product candidates that are important to its business. If Graphite or its licensors are unable to obtain or maintain patent protection with respect to its platform technology and its product candidates, or if the scope of the patent protection secured is not sufficiently broad, its competitors could develop and commercialize products and technology similar or identical to Graphite and its ability to commercialize its product candidates may be adversely affected.

The patent prosecution process is expensive, time-consuming, and complex, and Graphite may not be able to file, prosecute, maintain, enforce, or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, Graphite may not pursue or obtain patent protection in all relevant markets. It is also possible that Graphite will fail to identify patentable aspects of its research and development output in time to obtain patent protection. Although Graphite enters into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of its research and development output, such as its employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors, and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing its ability to seek patent protection. In addition, Graphite's ability to obtain and maintain valid and enforceable patents depends on whether the differences between its inventions and the prior art allow its inventions to be patentable over the prior art. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent

applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, Graphite cannot be certain that it or its licensors were the first to make the inventions claimed in Graphite's owned or any licensed patents or pending patent applications, or that Graphite or its licensors were the first to file for patent protection of such inventions.

No consistent policy regarding the scope of claims allowable in the field of gene editing has emerged in the United States. The scope of patent protection outside of the United States is also uncertain. Changes in either the patent laws or their interpretation in the United States and other countries may diminish Graphite's ability to protect its inventions, obtain, maintain, enforce and defend its intellectual property rights and, more generally, could affect the value of its intellectual property or narrow the scope of its owned and licensed patent rights. With respect to both in-licensed and owned intellectual property, Graphite cannot predict whether the patent applications Graphite and its licensors are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will be valid and enforceable and provide sufficient protection from competitors. Further, it is anticipated that in mid-2023, European patent applications will have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court ("UPC"). This will be a significant change in European patent practice. As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications Graphite licenses or owns currently or in the future issue as patents, they may not issue in a form that will provide Graphite with any meaningful protection, prevent competitors or other third parties from competing with Graphite, or otherwise provide Graphite with any competitive advantage. Any patents that Graphite owns or in-licenses may be challenged, narrowed, circumvented, or invalidated by third parties. Consequently, Graphite does not know whether any of its platform advances and product candidates will be protectable or remain protected by valid and enforceable patents. Graphite's competitors or other third parties may be able to circumvent its patents by developing similar or alternative technologies or products in a non-infringing manner.

In addition, given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, Graphite's intellectual property may not provide it with sufficient rights to exclude others from commercializing products similar or identical to Graphite. Moreover, some of its owned and in-licensed patents and patent applications may in the future be, co-owned by Graphite with third parties. If Graphite is unable to obtain an exclusive license to such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including Graphite's competitors, and such competitors could market competing products and technology. In addition, Graphite may need the cooperation of any such co-owners of Graphite's patent rights in order to enforce such patents against third parties, and such cooperation may not be provided to Graphite. Any of the foregoing could have a material adverse effect on Graphite's competitive position, business, financial conditions, results of operations, and prospects.

Graphite's rights to develop and commercialize its gene editing platform technology and product candidates are subject, in part, to the terms and conditions of licenses granted to Graphite by others.

Graphite depends on intellectual property licensed from third parties, and its licensors may not always act in its best interest. If Graphite fails to comply with its obligations under its intellectual property licenses, if the licenses are terminated, or if disputes regarding these licenses arise, Graphite could lose significant rights that are important to its business.

Graphite has licensed and is dependent on certain patent rights and proprietary technology from third parties that are important or necessary to the development of its gene editing technology and product candidates. For example, Graphite is a party to a license agreement with The Board of Trustees of the Leland Stanford Junior University ("Stanford") pursuant to which Graphite in-licenses key patent applications for its gene editing platform technology and product candidates ("the Stanford License Agreement"). This license agreement

imposes various diligence, milestone payment, royalty, insurance, and other obligations on Graphite. If Graphite fails to comply with these obligations, its licensors may have the right to terminate its license, in which event Graphite would not be able to develop or market its gene editing platform or any other technology or product candidates covered by the intellectual property licensed under this agreement. For example, under the Stanford License Agreement, Graphite is required to initiate clinical trial programs in accordance with the development plan and development milestones for the development of a licensed product covered by the licensed patent rights. If Graphite fails to initiate such clinical trial programs, its rights with respect to the licensed patent rights may terminate. may be able to license their rights to other third parties, including Graphite's competitors, and Graphite's competitors could market competing products and technology. In addition, Graphite may need the cooperation of any such co-owners of Graphite's patent applications in order to enforce such patent rights against third parties, and such cooperation may not be provided to Graphite.

Additionally, Graphite may collaborate with academic institutions to accelerate its preclinical research or development under written agreements with these institutions. In certain cases, these institutions provide Graphite with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Even if Graphite were to hold such an option, Graphite may be unable to negotiate a license from the institution within the specified timeframe or under terms that are acceptable to Graphite. If Graphite is unable to do so, the institution may offer the intellectual property rights to others, potentially blocking its ability to pursue its program.

For example, the licensing or acquisition of third-party intellectual property rights is a highly competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that Graphite may consider attractive or necessary. These established companies may have a competitive advantage over Graphite due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive Graphite to be a competitor may be unwilling to assign or license rights to Graphite. Graphite also may be unable to license or acquire third-party intellectual property rights on terms that would allow Graphite to make an appropriate return on its investment or at all. If Graphite is unable to successfully obtain rights to required third party intellectual property rights or maintain the existing intellectual property rights Graphite has, Graphite may have to abandon development of the relevant program or product candidate, which could have a material adverse effect on its business, financial condition, results of operations, and prospects.

The intellectual property landscape around the technologies Graphite uses or plans to use, including gene editing technology, is highly dynamic, and third parties may initiate legal proceedings alleging that Graphite is infringing, misappropriating, or otherwise violating their intellectual property rights, the outcome of which would be uncertain and may prevent, delay or otherwise interfere with its product discovery and development efforts.

Because of the large number of patents issued and patent applications filed in Graphite's field, third parties may allege they have patent rights encompassing Graphite's product candidates, technologies or methods. Third parties may assert that Graphite is employing or has employed their proprietary technology without authorization and may file patent infringement claims or lawsuits against Graphite, and if Graphite is found to infringe such third-party patents, Graphite may be required to pay damages, cease commercialization of the infringing technology, or obtain a license from such third parties, which may not be available on commercially reasonable terms or at all. In addition, Graphite has in the past, and may in the future, receive an offer for license from third parties regarding their proprietary intellectual property for which they may believe encompass Graphite's product candidates and technologies. Graphite will evaluate such offers for relevance to its business.

The field of gene editing is still in its infancy, and no such therapeutic product candidates have reached the market. Due to the intense research and development that is taking place by several companies, including Graphite and Graphite's competitors, in this field, the intellectual property landscape is evolving and in flux, and it may remain uncertain for the coming years. There may be significant intellectual property related litigation and proceedings relating to Graphite's owned and in-licensed, and other third-party, intellectual property and proprietary rights in the future.

Graphite's commercial success depends upon its ability and the ability of its collaborators and present and future licensors to develop, manufacture, market, and sell any product candidates that Graphite may develop and use its proprietary technologies without infringing, misappropriating, or otherwise violating the intellectual property and proprietary rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights as well as administrative proceedings for challenging patents, including interference, derivation, *inter partes* review, post grant review, and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. Graphite may be subject to and may in the future become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to its platform technology and its product candidates, including interference proceedings, post-grant review, *inter partes* review, and derivation proceedings before the USPTO and similar proceedings in foreign jurisdictions such as oppositions before the EPO. Numerous U.S. and foreign issued patents and pending patent applications that are owned by third parties exist in the fields in which Graphite is developing its product candidates and they may assert infringement claims against Graphite based on existing patents or patents that may be granted in the future, regardless of their merit.

As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that Graphite's platform technology and product candidates may give rise to claims of infringement of the patent rights of others. Moreover, it is not always clear to industry participants, including Graphite, which patents cover various types of therapies, products or their methods of use or manufacture. There may also be third-party patents of which Graphite is currently unaware with claims to technologies, methods of manufacture or methods for treatment related to the use or manufacture of its product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that Graphite's product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of its technologies infringes upon these patents.

Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which Graphite is developing product candidates. Some of its product candidates make use of CRISPR-based technology, which is a field that is highly active for patent filings. As of June 2019, it was reported that approximately 2072 patent families worldwide related to CRISPR gene editing inventions and uses as the description and/or claims of these patent families specifically focus on a CRISPR-type system. The extensive patent filings related to CRISPR make it difficult for Graphite to assess the full extent of relevant patents and pending applications that may cover its gene editing platform technology and product candidates and their use or manufacture. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of its gene editing platform technology and product candidates. For example, Graphite is aware of a patent portfolio that is co-owned by the University of California, University of Vienna and Emmanuelle Charpentier, or the University of California Portfolio, which contains multiple patents and pending applications directed to gene editing. Graphite is also aware of patents and patent applications directed to gene editing owned or co-owned by the Broad Institute, MIT and Harvard University, Toolgen, and Sigma Aldrich. Graphite's ability to commercialize its product candidates may be adversely affected if it does not obtain a license to these patents. Graphite may not be able to obtain any required license on commercially reasonable terms or at all. Even if Graphite was able to obtain a license, it could be nonexclusive, thereby giving Graphite's competitors and other third parties access to the same technologies licensed to Graphite, and it could require Graphite to make substantial licensing and royalty payments. If Graphite is unable to obtain a necessary license to a third-party patent on commercially reasonable terms, Graphite may be unable to commercialize its gene editing platform technology or product candidates or such commercialization efforts may be significantly delayed, which could in turn significantly harm its business.

Graphite's ability to commercialize Graphite's product candidates in the United States and abroad may be adversely affected if Graphite cannot obtain a license on commercially reasonable terms to relevant third-party patents that cover its product candidates or platform technology. Even if Graphite believes third-party intellectual property claims are without merit, there is no assurance that a court would find in its favor on questions of

infringement, validity, enforceability, or priority. A court of competent jurisdiction could hold that these third party patents are valid, enforceable, and infringed, which could materially and adversely affect Graphite's ability to commercialize its product candidates and any other product candidates or technologies covered by the asserted third-party patents. In order to successfully challenge the validity of any such U.S. patent in federal court, Graphite would need to overcome a presumption of validity. As this burden is a high one requiring Graphite to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. If Graphite is found to infringe a third-party's intellectual property rights, and Graphite is unsuccessful in demonstrating that such patents are invalid or unenforceable, Graphite could be required to obtain a license from such third-party to continue developing, manufacturing, and marketing Graphite's product candidates and Graphite's technology. However, Graphite may not be able to obtain any required license on commercially reasonable terms or at all. Even if Graphite is able to obtain a license, it could be non-exclusive, thereby giving Graphite's competitors and other third parties access to the same technologies licensed to Graphite, and it could require Graphite to make substantial licensing and royalty payments. If Graphite is unable to obtain a necessary license to a third-party patent on commercially reasonable terms, Graphite may be unable to commercialize Graphite's platform technology or product candidates or such commercialization efforts may be significantly delayed, which could in turn significantly harm its business. Graphite also could be forced, including by court order, to cease developing, manufacturing, and commercializing the infringing technology or product candidates. In addition, Graphite could be found liable for significant monetary damages, including treble damages and attorneys' fees, if Graphite is found to have willfully infringed a patent or other intellectual property right. Claims that Graphite has misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on its business, financial condition, results of operations, and prospects.

Defense of third-party claims of infringement of misappropriation, or violation of intellectual property rights involves substantial litigation expense and would be a substantial diversion of management and employee time and resources from its business. Some third parties may be able to sustain the costs of complex patent litigation more effectively than Graphite can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on Graphite's ability to raise the funds necessary to continue its operations or could otherwise have a material adverse effect on its business, financial condition, results of operations and prospects. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of Graphite's common stock. Any of the foregoing events could have a material adverse effect on its business, financial condition, results of operations and prospects.

Third parties may assert that Graphite's employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

As is common in the biotechnology and biopharmaceutical industries, Graphite employs or has employed individuals who were previously employed at universities or other biotechnology or biopharmaceutical companies, including Graphite's competitors or potential competitors. Although no claims against Graphite are currently pending, and although Graphite tries to ensure that its employees and consultants do not use the proprietary information or know-how of others in their work for Graphite, Graphite may be subject to claims that Graphite or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If Graphite fails in defending any such claims, in addition to paying monetary damages, Graphite may lose valuable intellectual property rights or personnel. Even if Graphite is successful in defending against such claims, litigation or other legal proceedings relating to intellectual property claims may cause Graphite to incur significant expenses, and could distract Graphite's technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and, if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of Graphite's common stock. This type of litigation or proceeding could substantially increase

Graphite's operating losses and reduce Graphite's resources available for development activities. Graphite may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of Graphite's competitors may be able to sustain the costs of such litigation or proceedings more effectively than Graphite can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other intellectual property related proceedings could adversely affect Graphite's ability to compete in the marketplace.

If Graphite is unable to protect the confidentiality of its trade secrets, its business and competitive position would be harmed.

In addition to seeking patents for its technology and product candidates, Graphite also relies on know-how and trade secret protection, as well as confidentiality agreements, non-disclosure agreements and invention assignment agreements with its employees, consultants and third-parties, to protect its confidential and proprietary information, especially where Graphite does not believe patent protection is appropriate or obtainable.

It is Graphite's policy to require its employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors, and other third parties to execute confidentiality agreements upon the commencement of employment or consulting relationships with Graphite. These agreements provide that all confidential information concerning Graphite's business or financial affairs developed by or made known to the individual or entity during the course of the party's relationship with Graphite is to be kept confidential and not disclosed to third parties, except in certain specified circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual, and that are related to Graphite's current or planned business or research and development or made during normal working hours, on Graphite's premises or using Graphite's equipment or proprietary information, are Graphite's exclusive property. In the case of consultants and other third parties, the agreements provide that all inventions conceived in connection with the services provided are Graphite's exclusive property. However, Graphite cannot guarantee that it has entered into such agreements with each party that may have or have had access to its trade secrets or proprietary technology and processes. Additionally, the assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and Graphite may be forced to bring claims against third parties, or defend claims that they may bring against Graphite, to determine the ownership of what Graphite regards as its intellectual property. Any of these parties may breach the agreements and disclose its proprietary information, including its trade secrets, and Graphite may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time-consuming, and the outcome is unpredictable.

In addition to contractual measures, Graphite tries to protect the confidential nature of its proprietary information through other appropriate precautions, such as physical and technological security measures. However, trade secrets and know-how can be difficult to protect. These measures may not, for example, in the case of misappropriation of a trade secret by an employee or third party with authorized access, provide adequate protection for Graphite's proprietary information. Graphite's security measures may not prevent an employee or consultant from misappropriating its trade secrets and providing them to a competitor, and any recourse Graphite might take against this type of misconduct may not provide an adequate remedy to protect Graphite's interests fully. In addition, trade secrets may be independently developed by others in a manner that could prevent Graphite from receiving legal recourse. If any of Graphite's confidential or proprietary information, such as Graphite's trade secrets, were to be disclosed or misappropriated, or if any of that information was independently developed by a competitor, Graphite's competitive position could be harmed.

In addition, some courts inside and outside the United States are sometimes less willing or unwilling to protect trade secrets. If Graphite chooses to go to court to stop a third party from using any of its trade secrets, Graphite may incur substantial costs. Even if Graphite is successful, these types of lawsuits may consume its time and other resources. Any of the foregoing could have a material adverse effect on its business, financial condition, results of operations and prospects.

Risks Related to Graphite's Relationships with Third Parties

Graphite expects to rely on third parties to conduct its clinical trials and some aspects of its research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

Graphite has relied on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of its research and preclinical testing, and Graphite expects to rely on third parties to help conduct any potential clinical trials. Any of these third parties may terminate their engagements with Graphite at any time under certain criteria. If Graphite needs to enter into alternative arrangements, it may delay its product development activities.

Graphite's reliance on these third parties to conduct any potential clinical trials and for research and development activities will reduce its control over these activities but will not relieve Graphite of its responsibilities. For example, Graphite will remain responsible for ensuring that each of its potential clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA, the EMA and other regulatory authorities require Graphite to comply with standards, commonly referred to as Good Clinical Practices, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected.

Although Graphite may design any potential clinical trials for future product candidates, CROs will conduct some or all of the clinical trials. As a result, many important aspects of its development programs, including their conduct and timing, will be outside of Graphite's direct control. Graphite's reliance on third parties to conduct current and future preclinical studies and future clinical trials will also result in less direct control over the management of data developed through preclinical studies and clinical trials than would be the case if Graphite was relying entirely upon its own staff. Communicating with third parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Third parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues;
- undergo changes in priorities or become financially distressed; or
- form relationships with other entities, some of which may be Graphite's competitors.

These factors may materially adversely affect the willingness or ability of third parties to conduct Graphite's preclinical studies and clinical trials and may subject Graphite to unexpected cost increases that are beyond Graphite's control. If the CROs and other third parties do not perform preclinical studies and future clinical trials in a satisfactory manner, breach their obligations to Graphite or fail to comply with regulatory requirements, the development, regulatory approval and commercialization of its product candidates may be delayed, Graphite may not be able to obtain regulatory approval and commercialize its product candidates, or its development programs may be materially and irreversibly harmed. If Graphite is unable to rely on preclinical and clinical data collected by its CROs and other third parties, Graphite could be required to repeat, extend the duration of, or increase the size of any preclinical studies or clinical trials Graphite conducts and this could significantly delay commercialization and require greater expenditures, which could have a material adverse effect on its business, financial condition, result of operations, and prospects.

Graphite also expects to rely on third parties to store and distribute drug supplies for its clinical trials. Any performance failure on the part of its distributors could delay any potential clinical development or marketing approval of its product candidates or commercialization of its therapies, producing additional losses and depriving Graphite of potential product revenue.

Dr. Matthew Porteus, Graphite's co-founder and a member of its board of directors, may have actual or potential conflicts of interest because of his position with Stanford.

Dr. Porteus serves on Graphite's board of directors, its Scientific & Clinical Advisory Board and as its paid consultant and retains his position and affiliation with Stanford. Furthermore, Dr. Porteus holds shares of Graphite's restricted common stock subject to vesting based, among other things, on his continued service to Graphite as a director, employee or consultant. Dr. Porteus' position at Stanford creates, or may create the appearance of, conflicts of interest when Graphite asks Dr. Porteus to make decisions that could have different implications for Stanford than the decisions have for Graphite or for himself, including decisions related to its license of intellectual property rights from Stanford and other contractual relationships Graphite may enter into from time to time with Stanford.

Graphite contracts with third parties for the manufacture of materials for its research programs and preclinical studies and expects to continue to do so for clinical trials and for commercialization of its product candidates. This reliance on third parties increases the risk that Graphite will not have sufficient quantities of such materials, product candidates, or any products that Graphite may develop and commercialize, or that such supply will not be available to Graphite at an acceptable cost or timelines, which could delay, prevent, or impair its development or commercialization efforts.

Graphite does not have any manufacturing facilities at the present time. It has historically relied on third-party manufacturers for the manufacture of materials for its research programs and preclinical studies, including its viral vectors, GMP plasmids, RNA guides and Cas9.

Graphite may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms for one or more of its material needs. Even if Graphite is able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the possible failure of the third party to manufacture Graphite's product candidates according to Graphite's schedule, or at all, including if the third party gives greater priority to the supply of other products over its product candidates or otherwise do not satisfactorily perform according to the terms of the agreements between Graphite and them;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of Graphite's proprietary information, including Graphite's trade secrets and know-how;
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for Graphite; and
- reliance on the third party for regulatory compliance, quality assurance, safety, and pharmacovigilance and related reporting.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside the United States. Graphite's failure, or the failure of its third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on Graphite, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocations, seizures or recalls of product candidates, operating restrictions, and criminal prosecutions, any of which could significantly and adversely affect supplies of Graphite's products and harm its business, financial condition, results of operations, and prospects.

Any products that Graphite may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of suppliers or manufacturers that operate under cGMP regulations and that might be capable of manufacturing for Graphite.

Any performance failure on the part of Graphite's existing or future manufacturers could delay any potential clinical development or marketing approval. Graphite does not currently have arrangements in place for redundant supply for bulk drug substances. If any one of its current contract manufacturer cannot perform as agreed, Graphite may be required to replace that manufacturer, or Graphite may be forced to manufacture the materials ourselves, for which it may not have the capabilities or resources, or enter into an agreement with a different third-party manufacturer, which Graphite may not be able to do on reasonable terms, if at all. In either scenario, Graphite's clinical trials supply could be delayed significantly as it establishes alternative supply sources. In some cases, the technical skills required to manufacture Graphite's products or product candidates may be unique or proprietary to the original third-party manufacturer and Graphite may have difficulty, or there may be contractual restrictions prohibiting Graphite from, transferring such skills to a back-up or alternate supplier, or Graphite may be unable to transfer such skills at all. In addition, if Graphite is required to change third-party manufacturers for any reason, Graphite will be required to verify that the new third-party manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations. Graphite will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process will produce its product candidate according to the specifications previously submitted to the FDA or another regulatory authority. The delays associated with the verification of a new third- party manufacturer could negatively affect its ability to develop product candidates or commercialize its products in a timely manner or within budget. Furthermore, a third-party manufacturer may possess technology related to the manufacture of its product candidate that such third-party manufacturer owns independently. This would increase Graphite's reliance on such third-party manufacturer or require Graphite to obtain a license from such third-party manufacturer in order to have another third-party manufacturer manufacture its product candidates. In addition, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that Graphite conduct bridging studies between its prior clinical supply used in its clinical trials and that of any new manufacturer. Graphite may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials.

Graphite's current and anticipated future dependence upon others for the manufacture of its product candidates or any products may adversely affect its future profit margins and its ability to commercialize any products that receive marketing approval on a timely and competitive basis.

Graphite may enter into collaborations with third parties for the research, development, and commercialization of certain of the product candidates it may develop. If any such collaborations are not successful, Graphite may not be able to capitalize on the market potential of those product candidates.

Graphite may seek third-party collaborators for the research, development, and commercialization of certain of the product candidates Graphite may develop. If Graphite enters into any such arrangements with any third parties, it will likely have limited control over the amount and timing of resources that its collaborators dedicate to the development or commercialization of any product candidates it may seek to develop with them. Graphite's ability to generate revenues from these arrangements will depend on its collaborators' abilities to successfully perform the functions assigned to them in these arrangements. Graphite cannot predict the success of any collaboration that it enters into.

Collaborations involving its research programs or its product candidates pose numerous risks to Graphite, including the following:

- Collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations.
- Collaborators may not pursue development and commercialization of its product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors such as an acquisition that diverts resources or creates competing priorities. If a present or future collaborator of Graphite was to be involved in a business combination, the continued pursuit and emphasis on its product development or commercialization program under such collaboration could be delayed, diminished, or terminated.

- Collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials, or require a new formulation of a product candidate for clinical testing.
- Collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with Graphite's product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than Graphite's.
- Collaborators with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such products.
- Collaborators may not properly obtain, maintain, enforce, or defend Graphite's intellectual property or proprietary rights or may use its proprietary information in such a way as to invite litigation that could jeopardize or invalidate its proprietary information or expose Graphite to potential litigation.
- Disputes may arise between the collaborators and Graphite that result in the delay or termination of the research, development, or commercialization of Graphite's therapies or product candidates or that result in costly litigation or arbitration that diverts management attention and resources.
- Collaborators may not provide Graphite with timely and accurate information regarding development progress and activities under the collaboration or may limit Graphite's ability to share such information, which could adversely impact its ability to report progress to its investors and otherwise plan Graphite's own development of its product candidates.
- Graphite may lose certain valuable rights under circumstances identified in Graphite's collaborations, including if Graphite undergoes a change of control.
- Collaborators may require Graphite to incur non-recurring and other charges, increase its near- and long- term expenditures, issue securities that dilutes its existing stockholders, or disrupts its management and business.
- Collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates Graphite develops.
- Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all.

If Graphite's collaborations do not result in the successful development and commercialization of product candidates, or if one of its collaborators terminates its agreement with Graphite, Graphite may not receive any future research funding or milestone or royalty payments under the collaboration. If Graphite does not receive the funding it expects under these agreements, its development of product candidates could be delayed, and it may need additional resources to develop product candidates. In addition, if one of Graphite's collaborators terminates its agreement with Graphite, Graphite may find it more difficult to find a suitable replacement collaborator or attract new collaborators, and its development programs may be delayed or the perception of Graphite in the business and financial communities could be adversely affected. All of the risks relating to product development, regulatory approval, and commercialization described here apply to the activities of its collaborators.

If conflicts arise between Graphite and its collaborators or strategic partners, these parties may act in a manner adverse to Graphite and could limit its ability to implement its strategies.

If conflicts arise between Graphite's corporate or academic licensors, collaborators or strategic partners and Graphite, the other party may act in a manner adverse to Graphite and could limit Graphite's ability to implement its strategies. Some of Graphite's academic licensors, collaborators and strategic partners are conducting multiple product development efforts within each area that is the subject of the license or collaboration with Graphite. Graphite's licensors, collaborators or strategic partners, however, may develop, either alone or with others, products in related fields that are competitive with the product candidates Graphite develops that are the subject

of these collaborations with Graphite. Competing products, either developed by the licensors, collaborators or strategic partners or to which the licensors, collaborators or strategic partners have rights, may result in the withdrawal of partner support for Graphite's product candidates.

Some of Graphite's licensors, collaborators or strategic partners could also become Graphite's competitors in the future. Graphite's licensors, collaborators or strategic partners could develop competing products, preclude Graphite from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with Graphite prematurely, or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm Graphite's product development efforts.

If Graphite is not able to establish collaborations on a timely basis, on commercially reasonable terms, or at all, Graphite may have to alter, reduce or delay its development and commercialization plans, or increase its expenditures to fund development or commercialization activities at Graphite's own expense.

For some of the product candidates Graphite may develop, Graphite may decide to collaborate with other pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates. Graphite faces significant competition in seeking appropriate collaborations and collaborations are complex and time-consuming to negotiate and document. Whether Graphite reaches a definitive agreement for a collaboration will depend, among other things, upon its assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA, the EMA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to Graphite's ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with Graphite.

Graphite may also be restricted under existing collaboration agreements from entering into future collaboration agreements on certain terms with potential collaborators. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators, which further increases competition Graphite faces in seeking potential collaborations.

Graphite may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If Graphite is unable to do so, Graphite may have to curtail the development of the product candidate for which Graphite is seeking to collaborate, reduce or delay its development program or one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at Graphite's own expense. If Graphite elects to increase its expenditures to fund development or commercialization activities on its own, Graphite may need to obtain additional capital, which may not be available to Graphite on acceptable terms or at all. If Graphite does not have sufficient funds, Graphite may not be able to develop product candidates or bring them to market and generate product revenue.

Risks Related to Graphite's Employee Matters, Managing Growth, Public Health and Information Technology

Graphite's future success depends on its ability to retain its executive officers and other key employees and to attract, retain, and motivate qualified personnel.

Graphite is highly dependent on its executive officers, as well as the other principal members of its management and scientific teams. Each of its executive officers and such other principal members are employed "at will," meaning Graphite or they may terminate the employment at any time. Graphite does not maintain "key

person" insurance for any of its executives or other employees. The loss of the services of any of these persons could impede the achievement of its research, development, and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing, and sales and marketing personnel is critical to Graphite's success. Graphite may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Graphite also experiences competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, Graphite relies on consultants and advisors, including scientific and clinical advisors, to assist Graphite in formulating its research and development and commercialization strategy. Graphite's consultants and advisors, including its scientific co-founders, may be employed by employers other than Graphite and may have commitments under consulting or advisory contracts with other entities that may limit their availability to Graphite. The inability to recruit, or loss of services of certain executives, key employees, consultants, or advisors, may impede the progress of Graphite's research, development, and commercialization objectives and have a material adverse effect on its business, financial condition, results of operations, and prospects.

Graphite's internal computer systems, or those of its third-party vendors, collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of its product development programs, compromise sensitive information related to Graphite's business or prevent it from accessing critical information, potentially exposing Graphite to liability or otherwise adversely affecting its business.

Graphite's internal computer systems and those of its current and any future third-party vendors, collaborators and other contractors or consultants are vulnerable to damage or interruption from computer viruses, malware (including ransomware), phishing attacks, computer hackers, malicious code, employee theft or misuse, intentional or accidental action or lack of action by Graphite's employees or any contractors with access to its systems that leads to the introduction of vulnerabilities, denial-of-service attacks, sophisticated nation-state and nation-state-supported actors, supply chain attacks, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While Graphite seeks to protect its information technology systems from system failure and seeks to identify and manage specific cyber security risks, accident and security breach, if such an event were to occur and cause interruptions in its operations, it could result in a disruption of its development programs and its business operations, whether due to a loss of Graphite's trade secrets, personal information, or other proprietary information or other disruptions. For example, the loss of clinical trial data from future clinical trials could result in delays in Graphite's regulatory approval efforts and significantly increase its costs to recover or reproduce the data. If Graphite was to experience a significant cybersecurity breach of its information systems or data, the costs associated with the investigation, remediation and potential notification of the breach to counter-parties and data subjects could be material. In addition, Graphite's remediation efforts may not be successful. If Graphite does not allocate and effectively manage the resources necessary to build and sustain the proper technology and cybersecurity infrastructure, Graphite could suffer significant business disruption, including transaction errors, supply chain or manufacturing interruptions, processing inefficiencies, data loss or the loss of or damage to intellectual property or other proprietary information.

To the extent that any disruption or security breach were to result in a loss of, or damage to, Graphite or its third-party vendors', collaborators' or other contractors' or consultants' data or applications, or inappropriate disclosure of confidential, personal or proprietary information, Graphite could incur liability including litigation exposure, penalties and fines, it could become the subject of regulatory action or investigation, its competitive position could be harmed and the further development and commercialization of its product candidates could be delayed. Any of the above could have a material adverse effect on its business, financial condition, results of operations or prospects.

Graphite's operations are vulnerable to interruption by fire, earthquakes, power loss, telecommunications failure, terrorist activity, pandemics and other events beyond Graphite's control, which could harm its business.

Graphite has not undertaken a systematic analysis of the potential consequences to its business and financial results from a major flood, fire, earthquake, power loss, terrorist activity, pandemics or other disasters and do not have a recovery plan for such disasters. In addition, Graphite does not carry sufficient insurance to compensate for actual losses from interruption of its business that may occur, and any losses or damages incurred by Graphite could harm its business. The occurrence of any of these business disruptions could seriously harm Graphite's operations and financial condition and increase Graphite's costs and expenses.

Risks Related to Ownership of Graphite's Common Stock

Graphite does not know whether a market will develop for its common stock or what the market price of its common stock will be, and, as a result, it may be difficult for its stockholders to sell their shares of Graphite common stock.

Although Graphite common stock is listed on the Nasdaq Global Market, an active trading market for its common stock may not be sustained. If a market for Graphite common stock is not sustained, it may be difficult for its stockholders to sell its shares of common stock at an attractive price or at all. Graphite cannot predict the prices at which its common stock will trade in the future. It is possible that in one or more future periods Graphite's results of operations may be below the expectations of public market analysts and investors, and, as a result of these and other factors, the price of its common stock may fall.

The market price of Graphite common stock has been and may continue to be volatile and the value of an investment in its common stock may decline, which could result in substantial losses for investors.

The market price of Graphite common stock has been and is likely to continue to be highly volatile. From February 7, 2022 through February 8, 2024, the trading price of its common stock ranged between a low sales price of $1.59 and a high sales price of $11.30. As a result of this volatility, a holder may not be able to sell Graphite's common stock at or above the price at which such holder acquired shares of its common stock.

The market price for Graphite's common stock may be influenced by those factors discussed in this "Risk Factors" section and many others, including:

- the success of existing or new competitive product candidates or technologies;
- the timing and results of preclinical studies and clinical trials for its product candidates;
- failure or discontinuation of any of Graphite's product development and research programs;
- results of preclinical studies, clinical trials, or regulatory approvals of product candidates of Graphite's competitors, or announcements about new research programs or product candidates of its competitors;
- developments or changing views regarding the use of genetic medicines, including those that involve gene editing;
- commencement or termination of collaborations for Graphite's product development and research programs;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of Graphite's research programs, preclinical development, or product candidates that Graphite may develop;

- the results of Graphite's efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts, if any, that cover Graphite's stock;
- announcement or expectation of additional financing efforts;
- sales of Graphite's common stock by Graphite, its insiders or other stockholders;
- expiration of market stand-off or lock-up agreements;
- variations in Graphite's financial results or those of companies that are perceived to be similar to Graphite;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- the COVID-19 pandemic, natural disasters, or major catastrophic events;
- general economic, industry, and market conditions; and
- the other factors described in this "*Risk Factors*" section.

In recent years, the stock market in general, and the market for pharmaceutical and biotechnology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Broad market and industry factors may seriously affect the market price of Graphite's common stock, regardless of its actual operating performance. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of Graphite's stock price, Graphite may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from its business.

A significant portion of Graphite's total outstanding shares may be sold into the market in the near future, which could cause the market price of its common stock to decline significantly.

Sales of a substantial number of shares of Graphite's common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of its common stock. Persons who were its stockholders prior to the IPO continue to hold a substantial number of shares of Graphite's common stock. Significant portions of these shares are held by a small number of stockholders. Sales by Graphite's stockholders of a substantial number of shares, or the expectation that such sales may occur, could significantly reduce the market price of its common stock. Moreover, certain shares of its common stock have rights, subject to conditions, to require Graphite to file registration statements covering their shares or to include their shares in registration statements that Graphite may file for itself or other stockholders. Graphite has also registered or intends to register all shares of Graphite common stock that may be issued under its equity compensation plans or that are issuable upon exercise of outstanding Graphite options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates. In addition, Graphite's directors, executive officers and certain affiliates may establish programmed selling plans under Rule 10b5-1 of the Exchange Act for the purpose of effecting sales of its common stock. If any of these events cause a large number of Graphite's shares to be sold, or if it is perceived that they will be sold, in the public market, the market price of Graphite's common stock could decline.

Graphite's principal stockholders and management own a significant percentage of its stock and will be able to exert significant control over matters subject to stockholder approval.

As of February 1, 2024, Graphite's current executive officers, directors, holders of 5% or more of Graphite's capital stock and their respective affiliates beneficially owned approximately 64.07% of Graphite's common stock. This group of stockholders has the ability to control Graphite through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of Graphite's organizational documents or approval of any merger, sale of assets or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for its common stock that Graphite's stockholders may feel are in its best interest as one of its stockholders. The interests of this group of stockholders may not always coincide with the interests of Graphite's other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their common stock, and might affect the prevailing market price for Graphite's common stock.

Graphite is an "emerging growth company" and a "smaller reporting company," and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make its common stock less attractive to investors.

Graphite is an "emerging growth company," as defined in the Jumpstart Our Business Startups Act (the "JOBS Act") and may remain an emerging growth company for up to five years. For so long as Graphite remains an emerging growth company, it is permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended ("SOX"), not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information Graphite provides stockholders will be different than the information that is available with respect to other public companies.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. Accordingly, the information contained in Graphite's disclosure may be different from the information its stockholders receive from other public companies in which they hold stock. Graphite has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date Graphite (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, Graphite's financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Graphite is also a "smaller reporting company," meaning that the market value of its stock held by non-affiliates is less than $700.0 million and its annual revenue is less than $100.0 million during the most recently completed fiscal year. Graphite may continue to be a smaller reporting company if either (i) the market value of its stock held by non-affiliates is less than $250.0 million or (ii) its annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of Graphite's stock held by non-affiliates is less than $700.0 million. If Graphite is a smaller reporting company at the time Graphite ceases to be an emerging growth company, Graphite may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company
Graphite may choose to present only the two most recent fiscal years of audited financial statements in its Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Graphite cannot predict whether investors will find its common stock less attractive if it relies on these exemptions. If some investors find Graphite's common stock less attractive as a result, there may be a less active trading market for its common stock, and its stock price may be more volatile.

Graphite has broad discretion in the use of the capital it has raised and may not use it effectively.

Graphite cannot specify with certainty the particular uses of the capital it has raised, including the net proceeds from the IPO. Accordingly, its stockholders will have to rely upon the judgment of Graphite's management with respect to the use of these funds, with only limited information concerning management's specific intentions. Graphite's management may spend a portion or all of the net proceeds from its prior financings, including the IPO in ways that its stockholders may not desire or that may not yield a favorable return. The failure by Graphite's management to apply these funds effectively could harm its business, financial condition, results of operations and prospects. Pending their use, Graphite may invest the net proceeds from its prior financings, including the IPO in a manner that does not produce income or that loses value.

Provisions in Graphite's amended and restated certificate of incorporation, its amended and restated bylaws and Delaware law may have anti-takeover effects that could discourage an acquisition of Graphite by others, even if an acquisition would be beneficial to its stockholders, and may prevent attempts by its stockholders to replace or remove its current management, which could depress the trading price of its common stock.

Graphite's amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions that may have the effect of discouraging, delaying or preventing a change in control of Graphite or changes in its management that stockholders may consider favorable, including transactions in which its stockholders might otherwise receive a premium for their shares. Graphite's amended and restated certificate of incorporation and bylaws include provisions that:

- authorize "blank check" preferred stock, which could be issued by Graphite's board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to its common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of its stockholders can be called only by its board of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of Graphite's stockholders, including proposed nominations of persons for election to Graphite's board of directors;
- provide that vacancies on Graphite's board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- provide that Graphite's directors may be removed (i) only for cause and (ii) only by the affirmative vote of the holders of 75% or more of the outstanding shares of capital stock then entitled to vote at an election of directors;
- expressly authorize its board of directors to make, alter, amend or repeal its amended and restated bylaws; and
- require supermajority votes of the holders of its common stock to amend specified provisions of it amended and restated certificate of incorporation and amended and restated bylaws; however, if the Graphite board of directors recommends that the Graphite stockholders approve the amendment at a meeting of stockholders, the amendment shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in Graphite's management. These provisions could also limit the price that investors might be willing to pay in the future for shares of Graphite's common stock, thereby depressing the market price of Graphite's common stock.

In addition, because Graphite is incorporated in the State of Delaware, it is governed by the provisions of Section 203 of the DGCL, which prohibits a person who owns in excess of 15% of its outstanding voting stock from merging or combining with Graphite for a period of three years after the date of the transaction in which the person acquired in excess of 15% of its outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Any provision of Graphite's amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for its stockholders to receive a premium for their shares of its common stock, and could also affect the price that some investors are willing to pay for its common stock.

Graphite's amended and restated bylaws designate the Court of Chancery of the State of Delaware as the exclusive forum for certain state law litigation that may be initiated by its stockholders and the U.S. federal district courts as the exclusive forum for certain securities law actions, which could limit its stockholders' ability to litigate disputes with Graphite in a different judicial forum and increase the costs for its stockholders to pursue certain claims against Graphite.

Pursuant to Graphite's amended and restated bylaws, unless it consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on Graphite's behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of its current or former directors, officers or employees to Graphite or its stockholders; (iii) any action asserting a claim arising pursuant to any provision of the DGCL, its amended and restated certificate of incorporation or its amended and restated bylaws (including their interpretation, validity or enforceability); or (iv) any action asserting a claim governed by the internal affairs doctrine. Unless Graphite consents in writing to the selection of an alternate forum, the United States federal district courts shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. In addition, Graphite's amended and restated bylaws provides that any person or entity purchasing or otherwise acquiring any interest in shares of its capital stock is deemed to have notice of and consented to these exclusive forum provisions. The forum selection provisions in Graphite's amended and restated bylaws may limit its stockholders' ability to litigate disputes with Graphite in a judicial forum that they find favorable for disputes with Graphite or its directors, officers or employees, which may discourage the filing of lawsuits against Graphite and its directors, officers and employees, even though an action, if successful, might benefit Graphite's stockholders. In addition, these forum selection provisions may impose additional litigation costs for stockholders who determine to pursue any such lawsuits against Graphite.

Risks Related to LENZ

Risks Related to LENZ's Limited Operating History, Development and Commercialization of its Product Candidates

LENZ is a late-stage biopharmaceutical company with limited operating history. It has incurred significant losses and negative cash flows from operations since its formation, and LENZ anticipates that it will continue to incur losses for the foreseeable future. LENZ has no products approved for commercial sale, which may make it difficult for you to evaluate its current business and predict its future success and viability.

LENZ is a late-stage biopharmaceutical company with a limited operating history. Its operations to date have been limited to organizing the company, raising capital, developing its product candidates and beginning to prepare for commercialization, including building its commercial strategy, supply chain and distribution network.

Consequently, any predictions you make about LENZ's future success or viability may not be as accurate as they could be if it had a longer operating history. In addition, as a new business, LENZ may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. If one of its product candidates is approved by the FDA, LENZ will need to further expand its commercialization infrastructure to successfully launch such product. LENZ has not yet demonstrated its ability to successfully obtain marketing approvals, complete arrangements for third parties to manufacture the commercial-scale product on its behalf, or conduct sales and marketing activities necessary for successful product commercialization, and LENZ may not be successful in such a transition.

LENZ does not have any products approved for sale, it has not generated any revenue from the sale of products, has incurred significant net losses since the company's formation and has funded its operations primarily from the sale and issuance of redeemable convertible preferred stock. Its net losses were $7.6 million and $10.8 million for the years ended December 31, 2021 and 2022, respectively, and $46.3 million as of September 30, 2023. As of September 30, 2023, LENZ had an accumulated deficit of $71.6 million. Additionally, the net losses it incurs may fluctuate significantly from quarter to quarter such that a period-to-period comparison of LENZ's results of operations may not be a good indicator of its future performance. The size of LENZ's future net losses will depend, in part, on the rate of future growth of its expenses and its ability to generate revenue.

LENZ expects to continue incurring significant expenses and increasing operating losses for the foreseeable future. LENZ expects that its expenses will increase substantially if and as it:

- initiates additional clinical and other studies for its product candidates;
- changes or adds additional manufacturers or suppliers, some of which may require additional permits or other governmental approvals;
- creates additional infrastructure to support its operations as a public company and its product development and planned future commercialization efforts;
- seeks marketing approvals for its product candidates;
- establishes a sales, marketing, and distribution infrastructure to commercialize any products for which it may obtain marketing approval;
- seeks to identify, acquire and develop additional product candidates;
- acquires or in-licenses other product candidates and technologies;
- makes milestone or other payments in connection with the development or approval of its product candidates;
- maintains, protects, and expands its intellectual property portfolio; and
- experiences any delays or encounters issues with any of the above.

LENZ's prior losses and expected future losses have had and will continue to have an adverse effect on its working capital and ability to achieve and maintain profitability.

LENZ's business depends entirely on the development and commercialization of LNZ100 or LNZ101, and LENZ does not have additional product candidates in its current development pipeline. If LENZ is unable to successfully complete its clinical development program for LNZ100 or LNZ101 and obtain the marketing approvals necessary to commercialize either of them, or experiences significant delays in doing so, or if after obtaining marketing approvals, LENZ fails to commercialize any one of these product candidates, its business will be materially harmed. LENZ currently generates no revenues from sales of any products and may never generate revenue or be profitable.

LENZ has devoted a significant portion of its financial resources and business efforts to the development of LNZ100 and LNZ101, both of which include aceclidine as an active ingredient, for the treatment of presbyopia.

LENZ does not currently have other product candidates in its development pipeline, and its success depends entirely on LNZ100 and/or LNZ101. LENZ has no products approved for commercial sale and does not anticipate generating any revenue unless LNZ100 or LNZ101 receives the regulatory approval necessary for commercialization. LENZ's ability to generate revenues from product sales will depend on it obtaining marketing approval for and commercializing LNZ100 or LNZ101, and LENZ cannot accurately predict when or if LNZ100 or LNZ101 will be proven to be effective in humans for the proposed indication or whether either will receive marketing approval. LENZ's ability to generate revenue and achieve profitability also depends significantly on its ability, or any future collaborator's ability, to achieve a number of objectives, including:

- successful and timely completion of clinical development of its product candidates, including LNZ100, LNZ101 and any other future product candidates;
- effective investigational new drug applications ("INDs") from the Food and Drug Administration ("FDA") or comparable foreign applications that allow the commencement of its clinical trials or future clinical trials for its product candidates;
- completion of clinical studies in compliance with the FDA's current Good Clinical Practices ("GCPs") with positive results;
- the prevalence and severity of adverse events experienced with any of its product candidates;
- establishing and maintaining relationships with contract research organizations ("CROs") and clinical sites for the clinical development, both in the United States and internationally, of its product candidates, including LNZ100, LNZ101 and any other future product candidates;
- timely receipt of marketing approvals from applicable regulatory authorities for any product candidates for which LENZ successfully completes clinical development for their intended uses;
- making any required post-marketing approval commitments to applicable regulatory authorities;
- establishing and maintaining commercially viable supply and manufacturing relationships with third parties that can provide adequate products and services, in both amount and quality, to support clinical development and meet the market demand for product candidates that LENZ develops, if approved;
- successful commercial launch following any marketing approval, including the development of a commercial infrastructure, whether in-house or with one or more collaborators;
- maintaining compliance with regulatory requirements, including the FDA's current Good Manufacturing Practice ("cGMP") requirements;
- a continued acceptable safety profile both prior to and following any marketing approval of its product candidates;
- commercial acceptance of its product candidates by patients and the medical community;
- identifying, assessing and developing new product candidates;
- obtaining, maintaining and expanding patent protection, trade secret protection and regulatory exclusivity, both in the United States and internationally;
- protecting its rights in its intellectual property portfolio;
- defending against third-party interference or infringement claims, if any;
- obtaining favorable terms in any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize its existing or acquired product candidates;
- addressing any competing therapies and technological and market developments; and
- attracting, hiring and retaining qualified personnel.

LENZ may never be successful in achieving its objectives and, even if it is successful, it may never generate revenue that is significant or large enough to achieve profitability. If LENZ does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis. If LENZ fails to become and remain profitable, the value of the company could decrease. This could impair its ability to maintain or expand its research and development efforts, raise necessary additional capital, grow its business, and continue its operations.

LENZ's current product candidates, LNZ100 and LNZ101, are based on an active pharmaceutical ingredient (API) that has been previously approved and marketed outside of the United States, which exposes LENZ to additional risks.

The common API in LNZ100 and LNZ101, aceclidine, was previously approved by the EMA as a therapeutic for glaucoma by decreasing interocular pressure and had been marketed in more than 12 countries throughout Europe. Although LENZ expects to obtain new chemical entity ("NCE") exclusivity in the United States if it is the first to obtain FDA approval of a product candidate containing aceclidine as an API, such determination is only made at the time of approval. Accordingly, no regulatory authority, including the FDA, has established or provided any confirmation that LENZ's product candidates will in fact be regarded as an NCE, and there can be no assurance that either LNZ100 or LNZ101 will be the first product containing aceclidine to be approved by the FDA. Additionally, LENZ anticipates that manufacturers in Europe could make and sell aceclidine in generic form in the future, which could compete with its ability to commercialize in Europe. Previously, aceclidine was used as a treatment for glaucoma at concentrations higher than the concentrations used in LNZ100 and LNZ101. It is possible that if aceclidine is used again in Europe, it could be used at the wrong dosage and increase the possibility that patients experience adverse side effects related to aceclidine. Any adverse side effects that arise from the use of any form of aceclidine could prevent or inhibit the commercialization of LNZ100 or LNZ101 and seriously harm LENZ's business. Furthermore, if manufacturer demand for aceclidine increases in the future, particularly as a result of generic forms of aceclidine becoming available, LENZ may not be able to continue to obtain aceclidine on commercially reasonable terms, which would seriously harm its business.

Additionally, LNZ101 also contains brimonidine as an API, which has also been used in marketed products since the 1990s. It is an active ingredient in Alphagan, Alphagan P and Lumify, in each case at concentrations higher than the concentrations used in LNZ101, and may in the future be used in other products or product candidates. Any adverse side effects that arise from the use of any form of brimonidine could prevent or inhibit the commercialization of LNZ101 and seriously harm LENZ's business.

In addition, any approved or commercial drug product having the same API, including off-label use of such approved drug products, such as Glaucostat, Alphagan, Lumify and other generic forms of either API, could reduce the profitability of LNZ100 or LNZ101 even if LENZ obtains marketing approval from FDA or regulatory authorities outside of the United States. Any commercially available drug product having the same API could prevent LENZ or limit its ability to commercialize or to establish market share in the same jurisdiction even if it were to obtain marketing authorization in such jurisdiction.

Clinical trials are expensive, time-consuming, difficult to design and implement and involve an uncertain outcome. The outcome of preclinical testing and earlier clinical trials may not be predictive of the success of later clinical trials. The results of LENZ's clinical trials may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities, and LENZ may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidate.

Research and development of pharmaceutical products is inherently risky. LENZ cannot give any assurance that any of its product candidates will receive regulatory, including marketing, approval, which is necessary before they can be commercialized. The clinical trials and manufacturing of LENZ's product candidates are, and the manufacturing and marketing of its products, if approved, will be, subject to extensive and rigorous review

and regulation by numerous government authorities in the United States and in other countries where LENZ intends to test and market its product candidates. Before obtaining regulatory approvals for the commercial sale of any of its product candidates, LENZ must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that its product candidates are both safe and effective for use in each target indication. Product candidates in later stages of clinical trials may fail to show the desired safety, efficacy and durability profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. LENZ cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. Failure can occur at any time during the clinical trial process. Even if its ongoing and any future clinical trials are completed as planned, LENZ cannot be certain that its results will support the safety and effectiveness of its product candidates for their targeted indications or support continued clinical development of such product candidates. Product candidates in later stages of clinical studies may fail to show the desired safety and efficacy data or meet endpoints despite having progressed through preclinical and clinical studies.

The results of LENZ's preclinical and clinical studies of product candidates may not be predictive of the results of early-stage or later-stage clinical trials, and results of early clinical trials of its product candidates may not be predictive of the results of later-stage clinical trials. The results of clinical trials in one set of subjects may not be predictive of those obtained in another. In some instances, there can be significant variability in safety, efficacy or durability results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants.

In addition, even if such clinical trials are successfully completed, LENZ cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as it does, and more trials could be required before LENZ submits its product candidates for approval. For example, although LENZ has sought and received feedback from FDA on the designs of its clinical trials, FDA may ultimately disagree that LENZ's Phase 3 trials support approval for both LNZ100 and LNZ101, which may limit the optionality for LENZ to choose which product it will submit for regulatory approval. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, LENZ may be required to expend significant resources, which may not be available, to conduct additional trials in support of potential approval of its product candidates. Even if LENZ secures regulatory approval for any of its product candidates, the terms of such approval may limit the scope and use of the product candidate, which may also limit its commercial potential.

LENZ may also experience issues in conducting its clinical trials that would delay or prevent it from satisfying the applicable requirements of the FDA and other regulatory authorities, including:

- inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation of clinical trials for any future product candidates;
- delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for advanced clinical trials;
- delays in reaching agreement with the FDA or other regulatory authorities as to the design or implementation of its clinical trials;
- obtaining regulatory authorization to commence a clinical trial;

- delays in reaching, or fail to reach, agreement on acceptable terms with clinical trial sites or prospective CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different clinical trial sites;
- obtaining institutional review board ("IRB") approval at each trial site;
- recruiting suitable patients to participate in a clinical trial;
- having patients complete a clinical trial or return for post-treatment follow-up;
- inspections of clinical trial sites or operations by applicable regulatory authorities, or the imposition of a clinical hold;
- clinical sites, CROs or other third parties deviating from trial protocol or dropping out of a trial;
- failure to perform in accordance with applicable regulatory requirements, including the FDA's GCP requirements, or applicable regulatory requirements in other countries;
- addressing patient safety concerns that arise during the course of a trial, including occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- adding a sufficient number of clinical trial sites;
- manufacturing sufficient quantities of product candidate for use in clinical trials; or
- suspensions or terminations by IRBs of the institutions at which such trials are being conducted, by the Data Safety Monitoring Board ("DSMB"), for such trial or by the FDA or other regulatory authorities due to a number of factors, including those described above.

LENZ may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent its ability to receive marketing approval or commercialize its product candidates or significantly increase the cost of such trials, including:

- changes in regulatory requirements or guidance, or receive feedback from regulatory authorities that requires LENZ to modify the design of its clinical trials;
- clinical trials of its product candidates may produce negative or inconclusive results, and LENZ may decide, or regulators may require LENZ, to conduct additional clinical trials or abandon development programs;
- the number of patients required for clinical trials of its product candidates may be larger than LENZ anticipates, enrollment in these clinical trials may be slower than it anticipates or participants may drop out of these clinical trials at a higher rate than it anticipates;
- third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to LENZ in a timely manner, or at all;
- LENZ or its investigators might have to suspend or terminate clinical trials of its product candidates for various reasons, including non-compliance with regulatory requirements, a finding that its product candidates have undesirable side effects or other unexpected characteristics, or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of its product candidates may be greater than LENZ anticipates and it may not have funds to cover the costs;
- the supply or quality of its product candidates or other materials necessary to conduct clinical trials of its product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving its product candidates, or such requirements may not be as LENZ anticipates; and

- any future collaborators that conduct clinical trials may face any of the above issues, and may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for LENZ.

If LENZ is required to conduct additional clinical trials or other testing of its product candidates beyond those that it currently contemplates, if LENZ is unable to successfully complete clinical trials of its product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, LENZ may:

- incur unplanned costs;
- be delayed in obtaining marketing approval for its product candidates or not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings or a Risk Evaluation Mitigation Strategy ("REMS");
- be subject to additional post-marketing testing requirements;
- be subject to changes in the way the product is administered; or
- have regulatory authorities withdraw or suspend their approval of the product.

LENZ cannot be certain that its planned clinical trials or any other future clinical trials will be successful. For example, use of LNZ100 and LNZ101 requires the patient to follow a prescribed technique to administer the eye drops. In LENZ's Phase 2 clinical trial, patients were dosed by clinical staff in the office while in its Phase 3 clinical trial the product will be self-administered by patients on the vast majority of days. While under LENZ's current trial design patients are only measured for efficacy on days they are in the office during the trial, during which they will be dosed by clinical staff, failure to properly administer the eye drops by the patient or inappropriate technique demonstration by the eye care professional ("ECP"), may adversely affect the outcome of LNZ100 and/or LNZ101 in demonstrating safety or efficacy in one or more clinical trials. Additionally, any safety concerns observed in any one of LENZ's clinical trials in its targeted indications could limit the prospects for regulatory approval of its product candidates in those and other indications, which could have a material adverse effect on LENZ's business, financial condition and results of operations.

If LENZ experiences delays or difficulties in the enrollment and/or retention of subjects in clinical trials, its receipt of necessary regulatory approvals could be delayed or prevented.

Trials may be subject to delays as a result of patient enrollment taking longer than anticipated or patient withdrawal. LENZ may not be able to initiate or continue clinical trials for its product candidates if it is unable to locate and enroll a sufficient number of subjects to participate in these trials to such trial's conclusion as required by the FDA, EMA or other comparable foreign regulatory authorities. Patient enrollment is a significant factor in the timing of clinical trials. While as of November 28, 2023, LENZ's long-term safety trial (CLARITY-3) and first six-week safety and efficacy trial (CLARITY-1) are fully enrolled, and LENZ's second six-week safety and efficacy trial (CLARITY-2) is 97% enrolled, any future difficulties LENZ experiences relating to enrollment in the CLARITY-2 trial or complications in the CLARITY-1 or CLARITY-3 trials could delay regulatory approval for LNZ100 or LNZ101.

Patient enrollment may be affected if LENZ's competitors have ongoing clinical trials for product candidates that are under development for the same indications as its product candidates, and subjects who would otherwise be eligible for LENZ's clinical trials instead enroll in clinical trials of its competitors' product

candidates. Patient enrollment for any of LENZ's future clinical trials may be affected by other factors, including:

- size and nature of the patient population, and process for identifying patients;
- severity and difficulty of diagnosing the condition under investigation;
- availability and efficacy of approved drugs and other competing therapeutic candidates for the condition under investigation;
- the eligibility and exclusion criteria for the trial in question as defined in the protocol;
- its ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the design of the clinical trial;
- perceived risks and benefits of the product candidate under study;
- ECPs' and participants' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new products that may be approved for the indications LENZ is investigating;
- efforts to facilitate timely enrollment in clinical trials;
- participant referral practices of ECPs;
- the ability to monitor participants adequately during and after treatment;
- proximity and availability of clinical trial sites for prospective trial subjects;
- continued enrollment of prospective subjects by clinical trial sites; and
- the risk that subjects enrolled in clinical trials will drop out of the trials before completion.

LENZ's inability to enroll a sufficient number of subjects for its clinical trials would result in significant delays or may require it to abandon one or more clinical trials altogether. Enrollment delays in LENZ's clinical trials may result in increased development costs for its product candidates and jeopardize its ability to obtain marketing approval for the sale of its product candidates. Furthermore, LENZ expects to rely on CROs and clinical trial sites to ensure the proper and timely conduct of its clinical trials and LENZ will have limited influence over their performance. Even if LENZ is able to enroll a sufficient number of subjects for its clinical trials, it may have difficulty maintaining enrollment of such subjects in its clinical trials.

Even if LNZ100, LNZ101 or any other product candidate receives marketing approval, they may fail to achieve market acceptance by ECPs and patients, and the market opportunity for these products, if approved, may be smaller than LENZ estimates.

If LNZ100, LNZ101 or any other product candidate that LENZ develops receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by ECPs, patients, and others in the medical community. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. Both LNZ100 and LNZ101, if approved, would require a prescription by an ECP, which would require a visit to ECP, which can be perceived to be more burdensome to an individual who has never previously visited an ECP and limit the number of prescriptions that are written. Some ECPs may also be deterred by the potential loss of revenue from the sale of contact lenses and glasses or feel uncomfortable prescribing a new product.

Currently, there is only one pharmacologic option for presbyopia marketed by AbbVie under the brand Vuity. Despite an initial strong commercial launch with over 120,000 prescriptions filled in 2022, the refill rate for Vuity has lagged due to a variety of reasons. Based on a survey of 40 ECPs in a study LENZ commissioned, the majority of ECPs reported that the barrier to Vuity adoption was that the product either did not work or did

not work long enough. An additional survey of 18 optometrists indicated that 66% of their patients did not see duration past four hours despite one of the Vuity clinical trial results showing some effectiveness to the sixth hour. While the reported patient experience at three hours post-treatment aligns with the primary endpoint of Vuity efficacy at three hours in both Phase 3 trials, the limited functional benefit of Vuity at and beyond three hours was reportedly not sufficient to drive continued usage by patients. In fact, the ECPs and their patients identified both the low rate of effectiveness and the short duration of effectiveness as the key factors for discontinuing use. Because Vuity's clinical success did not translate to commercial success, it is possible that prior users of Vuity may be reluctant to try another miotic as a result of their negative experiences with Vuity. Similarly, even if LENZ believes that the clinical data supporting LNZ100 and/or LNZ101 may offer advantages over Vuity, the products have not been evaluated head-to-head, and LNZ100 and LNZ101 may not, in fact, provide meaningful advantages resulting in greater adoption or acceptance by ECPs and patients, even if LNZ100 and/or LNZ101 obtain marketing authorization.

Additionally, Vuity is marketed by AbbVie, a much larger pharmaceutical company with established brand recognition. As a result, even if LNZ100 and/or LNZ101 demonstrate promising or superior clinical results, including the treatment of presbyopia, it is possible that ECPs may continue to rely on these treatments rather than LNZ100, LNZ101 or any other product candidate, if approved for marketing by the FDA. In addition, if generic versions of any products that compete with any of LENZ's product candidates are approved for marketing by the FDA, they would likely be offered at a substantially lower price than LENZ expects to offer for its product candidates, if approved. As a result, ECPs, patients and others may choose to rely on such products rather than the product candidates of LENZ.

If LNZ100, LNZ101 or any other product candidate does not achieve an adequate level of acceptance, LENZ may not generate significant product revenues and it may not become profitable. The degree of market acceptance of LNZ100, LNZ101 or any other product candidate that LENZ develops, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages of its product candidates compared to alternative treatments, including the existing standard of care;
- LENZ's ability to offer products for sale at competitive prices, particularly in light of the lower cost of alternative treatments;
- the clinical indications for which the product is approved;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of ECPs to prescribe these therapies;
- the strength of LENZ's marketing and distribution support;
- the timing of market introduction of competitive products;
- the potential for LENZ's competitors to limit its access to the market through anti-competitive contracts or other arrangements;
- the prevalence and severity of any side effects; and
- any restrictions on the use of LENZ products together with other medications.

LENZ's assessment of the potential market opportunity for LNZ100, LNZ101 and other product candidates is based on industry and market data that it obtained from industry publications and research, surveys and studies conducted by third parties, some of which LENZ commissioned. Industry publications and third-party research, surveys and studies generally indicate that LENZ's information has been obtained from sources believed to be reliable, although LENZ does not guarantee the accuracy or completeness of such information. LENZ's estimates of the potential market opportunities for its product candidates include several key assumptions based on LENZ's

industry knowledge, industry publications, third-party research and other surveys, which may be based on a small sample size and fail to accurately reflect market opportunities. Further, LENZ has commissioned a number of market studies that are specific to LENZ and to its product candidates and used the results of these studies to help assess its market opportunity. If any of LENZ's assumptions or estimates, or these publications, research, surveys or studies prove to be inaccurate, then the actual market for LNZ100, LNZ101 or any of LENZ's other product candidates may be smaller than it expects, and as a result its product revenue may be limited and it may be more difficult for it to achieve or maintain profitability.

Interim, initial, "top-line" and preliminary data from LENZ's clinical trials that it announces or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, LENZ may publicly disclose interim, preliminary or top-line data from its preclinical studies and clinical trials. Interim data from clinical trials that LENZ may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available or as patients from its clinical trials continue other treatments for their condition. Preliminary or top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data LENZ previously published. As a result, interim, preliminary and top-line data should be viewed with caution until the final data are available. LENZ also makes assumptions, estimations, calculations and conclusions as part of its analyses of data, and it may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that LENZ reports may differ from future results of the same studies or trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated.

Further, others, including regulatory agencies, may not accept or agree with LENZ's assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and could have a material adverse effect on the success of LENZ's business. In addition, the information LENZ chooses to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what LENZ determines is material or otherwise appropriate information to include in its disclosure. If the interim, top-line or preliminary data that LENZ reports differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, LENZ's ability to obtain approval for, and commercialize, its product candidates may be harmed, which could harm its business, results of operations, prospects or financial condition. Further, disclosure of interim, top-line or preliminary data by LENZ or by its competitors could result in volatility in the price of the combined company's common stock after the merger and the Graphite private placement.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates progress through preclinical and clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause LENZ's product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of product candidates and jeopardize LENZ's ability to commercialize its product candidates, if approved, and generate revenue.

LENZ faces significant competition, and if its competitors develop and market technologies or products more rapidly than LENZ does or that are more effective, safer or less expensive than the product candidates LENZ develops, its commercial opportunities will be negatively impacted. LENZ's product candidates may, if approved, also face competition from existing branded, generic and off-label products.

The development and commercialization of new drug products is highly competitive. LENZ faces competition with respect to LNZ100 and LNZ101 and will face competition with respect to any other product candidates that it may seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. As its product candidates are for the treatment of presbyopia, LENZ may face competition from a variety of companies developing or marketing other pharmaceutical presbyopia therapies, including AbbVie (formerly Allergan), Bausch & Lomb, Eyenovia, Glaukos, Johnson & Johnson, Orasis, OSRX Pharmaceuticals (an affiliate of Ocular Science), Viatris (through licensing of Ocuphire's presbyopia products), Visus Therapeutics and Vyluma. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. Both LNZ100 and LNZ101, if approved, would require a prescription by an ECP, which would require a visit to ECP, which can be perceived to be more burdensome to an individual who has never previously visited an ECP and limit the number of prescriptions that are written. Some ECPs may also be deterred by the potential loss of revenue from the sale of contact lenses and glasses or feel uncomfortable prescribing a new product.

LENZ's product candidates may not demonstrate sufficient additional clinical benefits to ECPs, patients or payors to justify a higher price compared to using glasses, which are potentially just a one-time purchase.

LENZ's commercial opportunity could be reduced or eliminated if its competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any of LENZ's products that are approved. LENZ's competitors also may obtain FDA or other regulatory approval for their products more rapidly than LENZ may obtain approval for its products, which could result in LENZ's competitors establishing a strong market position before LENZ is able to enter the market.

Many of the companies against which LENZ is competing or against which it may compete in the future have substantially greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than LENZ does. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of LENZ's competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with LENZ in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, LENZ's programs.

If LENZ is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market its product candidates on acceptable terms, LENZ may be unable to successfully commercialize its product candidates that obtain regulatory approval.

LENZ plans to use the proceeds of the merger and the Graphite private placement, in part, to continue to build the sales and marketing infrastructure required to successfully commercialize its lead product candidate, subject to FDA approval. As of June 5, 2023, LENZ has substantially completed hiring of all senior leadership roles in the commercial team, including adding industry veterans with extensive experience in the pharmaceutical space. LENZ plans to launch with its own sales organization in the United States, which it envisions expanding to a substantially larger number individuals, focused on partnering with ECPs, while also deploying, in parallel, a

highly targeted consumer strategy. In order to achieve these commercialization goals for any product candidates, if approved, LENZ must build marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for each of the territories in which LENZ may have approval to sell and market its product candidates. LENZ may not be successful in accomplishing these required tasks.

Establishing and building out an internal sales and marketing team with technical expertise and supporting distribution capabilities to commercialize its product candidates will be expensive and time-consuming and will require significant attention of LENZ's executive officers to manage. Any failure or delay in the development of LENZ's internal sales, marketing and distribution capabilities could adversely impact the commercialization of any of its product candidates that it obtains approval to market, if LENZ does not have arrangements in place with third parties to provide such services on its behalf. Alternatively, if LENZ chooses to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment its own sales force and distribution systems or in lieu of its own sales force and distribution systems, LENZ will be required to negotiate and enter into arrangements with such third parties relating to the proposed collaboration. If LENZ is unable to enter into such arrangements when needed, on acceptable terms, or at all, it may not be able to successfully commercialize any of its product candidates that receive regulatory approval, or any such commercialization may experience delays or limitations. If LENZ is unable to successfully commercialize its approved product candidates, either on its own or through collaborations with one or more third parties, its future product revenue will suffer, and LENZ may incur significant additional losses.

LENZ's commercial strategy is focused on targeting and partnering with the estimated 15,000 ECPs that prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022. If LENZ is unable to obtain access to these ECPs or successfully demonstrate the clinical benefits of its products to adequate numbers of ECPs, if approved, its efforts to commercialize such products will be severely inhibited, which would have a material adverse effect on LENZ's business.

Additionally, a direct-to-consumer ("DTC") strategy can potentially be extremely costly. LENZ intends to deploy a targeted, cost-effective, digitally focused DTC strategy, but if it is unable to be sufficiently effective with a limited budget and are required to spend more than anticipated, LENZ may need to raise more capital, divert resources from other strategies or just fail to reach the intended market. As a result, a DTC strategy that is not sufficiently cost-effective can have a material adverse effect on LENZ's business.

If product liability lawsuits are brought against LENZ, it may incur substantial liabilities and may be required to limit commercialization of its products, if approved.

LENZ's business exposes it to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of LENZ's development programs. If its product candidates are approved for marketing, such claims could still result in an FDA, EMA or other regulatory authority investigation of the safety and effectiveness of such products, LENZ's manufacturing processes and facilities or its marketing programs. These investigations could potentially lead to a recall of its products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in injury to LENZ's reputation, withdrawal of clinical trial participants, costs to defend the related litigation, a diversion of management's time and LENZ's resources, initiation of investigations by regulators, substantial monetary awards to patients or other claimants, the inability to commercialize its product candidates and decreased demand for its product candidates, if approved for commercial sale. LENZ currently has product liability insurance that it believes is appropriate for its stage of development and may need to obtain higher levels prior to marketing any of its product candidates, if approved. Any insurance LENZ has or may obtain may not provide sufficient coverage against potential liabilities and, if judgments exceed its insurance coverage, could adversely affect LENZ's results of operations and business and

cause the combined company's stock price to decline. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, LENZ may be unable to maintain or obtain insurance coverage at a reasonable cost or in sufficient amounts to protect it against losses, including those caused by product liability claims.

A variety of risks associated with marketing LENZ's product candidates internationally could materially adversely affect its business.

LENZ is developing regulatory strategies for its product candidates outside the United States and, accordingly, LENZ expects that it or its partners would seek regulatory approval of its product candidates outside of the United States. As such, LENZ expects that it will be subject to additional risks related to operating in foreign countries if LENZ or such partners obtain the necessary approvals, including:

- differing regulatory requirements and drug pricing regimes in foreign countries;
- potential issues due to aceclidine having been previously marketed and sold in Europe as a treatment for glaucoma, including, but not limited to potential competition from or for manufacturers and suppliers, and potential assumptions, concerns or biases resulting from the limited efficacy of the prior marketed products;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the U.S. Foreign Corrupt Practices Act ("FCPA") or comparable foreign regulations;
- challenges enforcing LENZ's contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism.

These and other risks associated with LENZ's international operations or those of any applicable international partners may materially adversely affect its ability to attain or maintain profitable operations.

Risks Related to LENZ's Intellectual Property

If LENZ is unable to obtain and maintain sufficient intellectual property protection for its technology and products and product candidates it may develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, its competitors or other third parties could develop and commercialize products similar or identical to LENZ, and LENZ's ability to successfully develop and, if approved, commercialize its product candidates may be adversely affected.

LENZ relies upon a combination of patents, trademarks, trade secret protection, and confidentiality agreements to protect the intellectual property related to its development programs and product candidates. Its success depends in part on its ability to obtain and maintain patent protection in the United States and other countries with respect to LNZ100, LNZ101 and any future product candidates. LENZ seeks to protect its proprietary position by filing patent applications in the United States and abroad related to its development programs, product candidates and novel discoveries that are important to its business. The patent prosecution process is expensive and time-consuming, and LENZ may not be able to file, prosecute, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner.

The patents and patent applications that LENZ owns may fail to result in issued patents with claims that protect LNZ100, LNZ101 or any future product candidate in the United States or in other foreign countries. There is no assurance that all of the potentially relevant prior art relating to its patents and patent applications has been found, which can prevent a patent from issuing from a pending patent application, or be used to invalidate a patent. Even if patents do successfully issue and even if such patents cover LNZ100, LNZ101 or any future product candidate, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to LENZ could deprive it of rights necessary for the successful commercialization of any product candidates that LENZ may develop. Further, the scope and coverage of such patents may be so narrow that a third party could successfully design around its patents without materially impacting the therapeutic effectiveness of the resulting drug product. Further, if LENZ encounters delays in regulatory approvals, the period of time during which it could market a product candidate under patent protection could be reduced.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that LENZ or any of its potential future collaborators will be successful in protecting its product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- the USPTO requires LENZ to disclose all material references to the Patent Examiner during prosecution of its patent applications at the USPTO, and failure to do so could result in a third party successfully challenging LENZ's ability to enforce a patent against an infringer;
- patent applications may not result in any patents being issued;
- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- LENZ's competitors, many of whom have substantially greater resources than it does and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or block LENZ's ability to make, use and sell its product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for treatments of diseases or conditions that prove successful, as a matter of public policy regarding worldwide health concerns; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing products.

The patent prosecution process is also expensive and time consuming, and LENZ may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications or maintain and/or enforce patents that may issue based on its patent applications, at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. LENZ may not be able to obtain or maintain patent applications and patents due to the subject matter claimed in such patent applications and patents being in disclosures in the public domain. It is also possible that LENZ will fail to identify patentable aspects of its research and development output before it is too late to obtain patent protection. Moreover, if it chooses to license certain patent rights in the future from third parties, LENZ may not have the right to control the preparation, filing and prosecution of such patent applications, or to maintain the patents, directed to technology that it licenses from those third parties. LENZ may also require the cooperation of its future licensor, if any, in order to enforce the licensed patent rights, and such cooperation may not be provided. Therefore, any licensed patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of its business. LENZ cannot be certain that patent prosecution and maintenance activities by any of its future licensors have been or will be conducted in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. If they fail to do so, this could cause LENZ to lose rights in any applicable intellectual property that it in-licenses, and as a result its ability to develop and commercialize products or product candidates may be adversely affected and LENZ may be unable to prevent competitors from making, using and selling competing products.

If the patent applications LENZ holds or may in-license in the future with respect to its development programs and product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for LNZ100, LNZ101 or any future product candidate, it could dissuade other companies from collaborating with LENZ to develop product candidates, and threaten its ability to commercialize LNZ100, LNZ101 or future product candidates. Any such outcome could have a materially adverse effect on LENZ's business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has been and will continue to be the subject of litigation and new legislation, resulting in court decisions, including Supreme Court decisions, which have increased uncertainties as to the ability to enforce patent rights in the future. In addition, the laws of foreign countries may not protect LENZ's rights to the same extent as the laws of the United States. For example, many countries restrict the patentability of methods of treatment of the human body. Publications in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, LENZ cannot know with certainty whether it was the first to make the inventions claimed in its own patents or pending patent applications, or that it was the first to file for patent protection of such inventions. As a result of these and other factors, the issuance, scope, validity, enforceability, and commercial value of its patent rights are highly uncertain. LENZ's pending and future patent applications may not result in patents being issued which protect its technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of LENZ's patents or narrow the scope of its patent protection. For example, the America Invents Act created new administrative post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings that allow third parties to challenge the validity of issued patents. This applies to all of LENZ's U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. In addition to increasing uncertainty with regard to LENZ's ability to obtain patents in the

future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken LENZ's ability to obtain new patents or to enforce its existing patents and patents that it might obtain in the future.

Moreover, LENZ may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging its patent rights or the patent rights of others. The costs of defending patents or enforcing proprietary rights in post-issuance administrative proceedings and litigation can be substantial and the outcome can be uncertain. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, LENZ's patent rights, allow third parties to commercialize its technology or products and compete directly with LENZ, without payment to its, or result in LENZ's inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by its patents and patent applications is threatened, it could dissuade companies from collaborating with LENZ to license, develop or commercialize current or future product candidates.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and LENZ's owned and licensed patents and patent applications may be challenged in the courts or patent offices in the United States and abroad. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. An adverse decision in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit LENZ's ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of its technology and products. Generally, issued patents are granted a term of 20 years from the earliest claimed non-provisional filing date. In certain instances, patent term can be adjusted to recapture a portion of delay incurred by the USPTO in examining the patent application (patent term adjustment). The scope of patent protection may also be limited.

Without patent protection for its current or future product candidates, LENZ may be open to competition from generic versions of such products. Given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, its patent portfolio may not provide it with sufficient rights to exclude others from commercializing products similar or identical to those of LENZ.

Patent terms may be inadequate to protect LENZ's competitive position on its product candidates for an adequate amount of time.

Patent rights are of limited duration. In the United States, if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years after its first effective filing date. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. Even if patents covering its product candidates are obtained, once the patent life has expired for a product, LENZ may be open to competition from biosimilar or generic products. As a result, LENZ's patent portfolio may not provide it with sufficient rights to exclude others from commercializing product candidates similar or identical to those of LENZ. Upon issuance in the United States, the term of a patent can be increased by patent term adjustment, which is based on certain delays caused by the USPTO, but this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. The term of a U.S. patent may also be shortened if the patent is terminally disclaimed over an earlier-filed patent.

Depending upon the timing, duration and specifics of FDA marketing approval of LNZ100, LNZ101 and future product candidates, one or more of LENZ's U.S. patents may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years beyond the

normal expiration of the patent as compensation for patent term lost during drug development and the FDA regulatory review process, which is limited to the approved indication (or any additional indications approved during the period of extension). This extension is based on the first approved use of a product and is limited to only one patent that covers the approved product, the approved use of the product, or a method of manufacturing the product. Such patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with LENZ's assessment of whether such extensions are available, and may refuse to grant extensions to its patents, or may grant more limited extensions than LENZ requests. LENZ may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time-period or the scope of patent protection afforded could be less than it requests. If LENZ is unable to extend the expiration date of its existing patents or obtain new patents with longer expiry dates, its competitors may be able to take advantage of its investment in development and clinical trials by referencing its clinical and preclinical data to obtain approval of competing products following LENZ's patent expiration and launch their product earlier than might otherwise be the case.

Laws governing analogous patent term extension ("PTE") in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, LENZ may not receive an extension if it fails to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If LENZ is unable to obtain PTE or restoration, or the term of any such extension is less than it requests, the period during which LENZ will have the right to exclusively market its product will be shortened and its competitors may obtain approval of competing products following LENZ's patent expiration and may take advantage of its investment in development and clinical trials by referencing its clinical and preclinical data to launch their product earlier than might otherwise be the case, and LENZ's revenue could be reduced, possibly materially.

Obtaining and maintaining LENZ's patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and its patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or patent applications will be due to be paid to the USPTO and other foreign patent agencies in several stages over the lifetime of LENZ's patents and patent applications. The USPTO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on LENZ's international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. If LENZ or any of its licensors fail to maintain the patents and patent applications covering LNZ100, LNZ101 or any future product candidate, its competitors may be able to enter the market, which would have an adverse effect on LENZ's business.

LENZ may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect its ability to develop and market its products.

As the biopharmaceutical industry expands and more patents are issued, the risk increases that LENZ's product candidates may be subject to claims of infringement of the patent rights of third parties. There can be no assurance that LENZ's operations do not, or will not in the future, infringe, misappropriate or otherwise violate existing or future third-party patents or other intellectual property rights. Identification of third-party patent rights

that may be relevant to its operations is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. LENZ cannot guarantee that any of its patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can LENZ be certain that it has identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of its current and future product candidates in any jurisdiction.

Numerous U.S. and foreign patents and pending patent applications exist in LENZ's market that are owned by third parties. LENZ's competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with LENZ's ability to make, use and sell its product candidates. LENZ does not always conduct independent reviews of pending patent applications and patents issued to third parties. Patent applications in the United States and elsewhere are typically published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Certain U.S. applications that will not be filed outside the United States can remain confidential until patents issue. In addition, patent applications in the United States and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived. Furthermore, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover LENZ's product candidates or the use of its product candidates. As such, there may be applications of others now pending or recently revived patents of which LENZ is unaware. These patent applications may later result in issued patents, or the revival of previously abandoned patents, that may be infringed by the manufacture, use or sale of LENZ's product candidates or will prevent, limit or otherwise interfere with its ability to make, use or sell its product candidates.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. LENZ's interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact its ability to market its products. For example, LENZ may incorrectly determine that its product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. LENZ's determination of the expiration date of any patent in the United States or abroad that it considers relevant may be incorrect, and its failure to identify and correctly interpret relevant patents may negatively impact LENZ's ability to develop and market its products.

LENZ may become involved in third-party claims of intellectual property infringement, which may delay or prevent the development and commercialization of LNZ100, LNZ101 and any future product candidate.

LENZ's commercial success depends in part on it avoiding infringement and other violations of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, derivation, and administrative law proceedings, *inter partes* review, and post-grant review before the USPTO, as well as oppositions and similar processes in foreign jurisdictions. LENZ may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights and who allege that its product candidates, uses and/or other proprietary technologies infringe their intellectual property rights. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which LENZ and its collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as LENZ gains greater visibility and market exposure as a public company, the risk increases that its product candidates or other business activities may be subject to claims of infringement of the patent and other proprietary rights of third parties. Third parties may assert that LENZ is infringing their patents or employing their proprietary technology without authorization.

Also, there may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of LENZ's current and future product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that LENZ's current or future product candidates may infringe.

In addition, third parties may obtain patent rights in the future and claim that use of LENZ's technologies infringes upon their rights. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of its product candidates, any molecules formed during the manufacturing process, methods of treating certain diseases or conditions that LENZ is pursuing with its product candidates, LENZ's formulations including combination therapies, or any final product itself, the holders of any such patents may be able to block LENZ's ability to commercialize such product candidate unless it obtained a license under the applicable patents, or until such patents expire. Such a license may not be available on commercially reasonable terms or at all. In addition, LENZ may be subject to claims that it is infringing other intellectual property rights, such as trademarks or copyrights, or misappropriating the trade secrets of others, and to the extent that its employees, consultants or contractors use intellectual property or proprietary information owned by others in their work for LENZ, disputes may arise as to the rights in related or resulting know-how and inventions.

Parties making claims against LENZ may obtain injunctive or other equitable relief, which could effectively block its ability to further develop and commercialize one or more of its current and future product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from its business. In the event of a successful infringement or other intellectual property claim against LENZ, it may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign its affected products, which may be impossible or require substantial time and monetary expenditure. LENZ cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, LENZ may need to obtain licenses from third parties to advance its research or allow commercialization of its product candidates, and LENZ has done so from time to time. LENZ may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, LENZ would be unable to further develop and commercialize one or more of its product candidates, which could harm its business significantly. LENZ cannot provide any assurances that third-party patents do not exist which might be enforced against its product candidates, resulting in either an injunction prohibiting its sales, or, with respect to its sales, an obligation on LENZ's part to pay royalties or other forms of compensation to third parties.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of LENZ's existing products, programs or intellectual property could be diminished. Accordingly, the market price of shares of its common stock may decline. Such announcements could also harm LENZ's reputation or the market for its future products, which could have a material adverse effect on its business.

LENZ may become involved in lawsuits to protect or enforce its patents or other intellectual property rights, or the patents or other intellectual property rights of any licensors, which could be expensive, time consuming, and unsuccessful.

Competitors may infringe or otherwise violate LENZ's patents, the patents of its licensors or its other intellectual property rights. To counter infringement or unauthorized use or misappropriations, LENZ or any future licensors may be required to file legal claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that one or more patent of LENZ or any of its current or future licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that its patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of LENZ's patents at risk of being invalidated or interpreted narrowly

and could put its patent applications at risk of not issuing. The initiation of a claim against a third party may also cause the third party to bring counter claims against LENZ such as claims asserting that its patents are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement, insufficient written description, or failure to claim patent-eligible subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as *ex parte* reexaminations, *inter partes* review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. In any patent infringement proceeding, there is a risk that a court will decide that a patent of LENZ or any future licensors is invalid or unenforceable, in whole or in part, and that LENZ does not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that LENZ does not have the right to stop the other party from using the invention at issue on the grounds that it or any future licensors' patent claims do not cover the invention, or decide that the other party's use of LENZ's or any future licensors' patented technology falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). An adverse outcome in a litigation or proceeding involving LENZ's or any future licensors' patents could limit LENZ's ability to assert its own or any future licensors' patents against those parties or other competitors and may curtail or preclude its ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect LENZ's competitive position, and its business, financial condition, results of operations and prospects. Similarly, if LENZ asserts trademark infringement claims, a court may determine that the marks LENZ has asserted are invalid or unenforceable, or that the party against whom LENZ has asserted trademark infringement has superior rights to the marks in question. In this case, LENZ could ultimately be forced to cease use of such trademarks.

LENZ cannot be certain that there is no invalidating prior art, of which it and the patent examiner were unaware during prosecution. For any patents and patent applications that LENZ licenses from third parties, it may have limited or no right to participate in the defense of such licensed patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, LENZ would lose at least part, and perhaps all, of the patent protection on its current or future product candidates. Such a loss of patent protection could harm its business.

LENZ may not be able to prevent, alone or with its licensors, misappropriation of its intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Its business could be harmed if in litigation the prevailing party does not offer LENZ a license on commercially reasonable terms. Any litigation or other proceedings to enforce LENZ's intellectual property rights may fail, and even if successful, may result in substantial costs and distract its management and other employees.

Even if LENZ establishes infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of LENZ's confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have an adverse effect on the price of the combined company's common shares. Moreover, LENZ cannot assure you that it will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if LENZ ultimately prevails in such claims, the monetary cost of such litigation and the diversion of the attention of its management and scientific personnel could outweigh any benefit LENZ receives as a result of the proceedings.

Because of the expense and uncertainty of litigation, LENZ may not be in a position to enforce its intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, LENZ may conclude that even if a third party is infringing its patents, any patents that may be issued as a result of LENZ's future patent applications, or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of LENZ or its stockholders. In such cases, LENZ may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution.

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing LENZ's ability to protect its products.

As is the case with other biopharmaceutical companies, LENZ's success is heavily dependent on intellectual property, particularly patents. Obtaining, defending, maintaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents, and may diminish LENZ's ability to protect its inventions, obtain, maintain, enforce and protect its intellectual property rights and, more generally, could affect the value of its intellectual property or narrow the scope of its future owned and licensed patents. The United States has enacted and implemented wide-ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to LENZ's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken LENZ's ability to obtain new patents or to enforce patents that it has licensed or that it might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions or changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken LENZ's ability to obtain new patents or to enforce patents that it has licensed or that it may obtain in the future. For example, the complexity and uncertainty of European patent laws have also increased in recent years. In Europe, a new unitary patent system took effect June 1, 2023, which will significantly impact European patents, including those granted before the introduction of such a system. Under the unitary patent system, European applications have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court (the "UPC"). As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation. Patents granted before the implementation of the UPC have the option of opting out of the jurisdiction of the UPC over the first seven years of the court's existence and remaining as national patents in the UPC countries. Patents that remain under the jurisdiction of the UPC will be potentially vulnerable to a single UPC-based revocation challenge that, if successful, could invalidate the patent in all countries who are signatories to the UPC. LENZ cannot predict with certainty the long-term effects of any potential changes.

LENZ may not be able to protect its intellectual property rights throughout the world, which could impair its business.

Patents are of national or regional effect, and filing, prosecuting, and defending patents covering LNZ100, LNZ101 and any future product candidate throughout the world would be prohibitively expensive. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States, even in jurisdictions where LENZ does pursue patent protection. Consequently, LENZ may not be able to prevent third parties from practicing its or any future licensors' inventions in all countries outside the United States, even in jurisdictions where LENZ or any future licensors do pursue patent protection, or from selling or importing products made using its or any future licensors' inventions in and into the

United States or other jurisdictions. Competitors may use its or any future licensors' technologies in jurisdictions where LENZ has not obtained patent protection to develop its own products and, further, may export otherwise infringing products to territories where LENZ may have or obtain patent protection, but where patent enforcement is not as strong as that in the United States. These unauthorized competitors' products may compete with LENZ's products in such jurisdictions and take away its market share where it does not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for LENZ to stop the infringement of its patents or marketing of competing products in violation of its intellectual property and proprietary rights generally. In addition, certain jurisdictions do not protect to the same extent or at all inventions that constitute new methods of treatment.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If LENZ or any of its licensors are forced to grant a license to third parties with respect to any patents relevant to its business, LENZ's competitive position may be impaired, and its business, financial condition, results of operations and prospects may be adversely affected.

Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws within the United States. LENZ may need to share its trade secrets and proprietary know-how with current or future partners, collaborators, contractors and others located in countries at heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors. As a result, LENZ may encounter significant problems in protecting and defending its intellectual property both in the United States and abroad. In addition, some courts inside and outside the United States are sometimes less willing or unwilling to protect trade secrets. If LENZ chooses to go to court to stop a third party from using any of its trade secrets, it may incur substantial costs. Even if LENZ is successful, these types of lawsuits may consume its time and other resources. Any of the foregoing could have a material adverse effect on its business, financial condition, results of operations and prospects.

If LENZ is unable to protect the confidentiality of its trade secrets, its business and competitive position would be harmed.

In addition to the protection afforded by patents, LENZ may seek to rely on trade secret protection to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of its product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by its patents. LENZ may not be able to meaningfully protect its trade secrets. Although LENZ requires all of its employees to assign their inventions to it, and require all of their employees, consultants, advisors and any third parties who have access to its proprietary know-how, information, or technology to enter into confidentiality agreements, LENZ cannot be certain that its trade secrets and other confidential proprietary information will not be disclosed to LENZ's competitors or that competitors will not otherwise gain access to its trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws within the United States. As a result, LENZ may encounter significant problems in protecting and defending its intellectual property both in the United States and abroad. If it is unable to prevent unauthorized material disclosure of its intellectual property to third parties, LENZ will not be able to establish or maintain a competitive advantage in its market, which could materially adversely affect its business, operating results and financial condition.

Because it expects to rely on third parties to manufacture LNZ100, LNZ101 and any future product candidates, and it expects to collaborate with third parties on the continuing development of LNZ100, LNZ101 and any future product candidates, LENZ must, at times, share trade secrets with them. LENZ also expects to conduct R&D programs that may require it to share trade secrets under the terms of its partnerships or agreements with CROs. LENZ seeks to protect its proprietary technology in part by entering into agreements containing confidentiality and use restrictions and obligations, including material transfer agreements, consulting agreements, manufacturing and supply agreements, confidentiality agreements or other similar agreements with its advisors, employees, contractors, CMOs, CROs, other service providers and consultants prior to disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose LENZ's confidential information, including its trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by LENZ's competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that its proprietary position is based, in part, on its know-how and trade secrets, a competitor's discovery of LENZ's trade secrets or other unauthorized use or disclosure would impair its competitive position and may have an adverse effect on LENZ's business and results of operations.

In addition, these agreements typically restrict the ability of LENZ's advisors, employees, third-party contractors CMOs, CROs, other service providers and consultants to publish data potentially relating to its trade secrets, although such agreements may contain certain limited publication rights. Despite LENZ's efforts to protect its trade secrets, its competitors may discover such trade secrets, either through breach of LENZ's agreements with third parties, independent development or publication of information by any of LENZ's third-party collaborators. A competitor's discovery of LENZ's trade secrets would impair its competitive position and have an adverse impact on its business.

Monitoring unauthorized disclosure and detection of unauthorized disclosure is difficult, and LENZ does not know whether the steps it has taken to prevent such disclosure are, or will be, adequate. If LENZ were to enforce a claim that a third party had illegally obtained and was using its trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. If LENZ chooses to go to court to stop a third party from using any of its trade secrets, LENZ may incur substantial costs. These lawsuits may consume its time and other resources even if LENZ is successful. For example, significant elements of its products, including confidential aspects of sample preparation, methods of manufacturing, and related processes and software, are based on unpatented trade secrets. Although LENZ takes steps to protect its proprietary information and trade secrets, including through contractual means with its employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to LENZ's trade secrets or disclose its technology.

LENZ may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of their former employers or other third parties or claims asserting ownership of what LENZ regards as its own intellectual property.

LENZ employs individuals who were previously employed at other biotechnology or pharmaceutical companies, or at research institutions, including its competitors or potential competitors. Although LENZ tries to ensure that its employees, consultants and advisors do not use the proprietary information or know-how of others in their work for LENZ, it may be subject to claims that these individuals have or LENZ has used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Further, although LENZ seeks to protect its ownership of intellectual property rights by ensuring that its agreements with its employees, collaborators, and other third parties with whom it does business include provisions requiring such parties to assign rights in inventions to LENZ, it may be subject to claims that LENZ or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of its employees' former employers or other third parties. Litigation may be necessary to

defend against these claims. If it fails in defending any such claims, in addition to paying monetary damages, LENZ may lose valuable intellectual property rights. An inability to incorporate such technologies or features would harm LENZ's business and may prevent it from successfully commercializing its technologies or product candidates. In addition, LENZ may lose personnel as a result of such claims and any such litigation, or the threat thereof, may adversely affect its ability to hire employees or contract with independent contractors. A loss of key personnel or their work product could hamper or prevent LENZ's ability to commercialize its technologies, or product candidates, which could adversely affect its business, financial condition, results of operations and prospects. Even if LENZ is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, LENZ may also be subject to claims that former employers, consultants or other third parties have an ownership interest in its patents or patent applications as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing LENZ's product candidates or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, LENZ may enter into agreements to clarify the scope of its rights in such intellectual property. There is no guarantee of success in defending these claims, and if LENZ fails in defending any such claims, in addition to paying monetary damages, LENZ may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such challenges may also result in its inability to develop, manufacture or commercialize its technologies and product candidates without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by LENZ's patents and patent applications is threatened, it could dissuade companies from collaborating with LENZ to license, develop or commercialize current or future technologies and product candidates. Even if LENZ is successful, litigation could result in substantial cost and be a distraction to its management and other employees. Any of the foregoing could adversely affect LENZ's business, financial condition, results of operations and prospects.

If its future trademarks and trade names are not adequately protected, then LENZ may not be able to build name recognition in its markets of interest and its business may be adversely affected.

LENZ intends to use registered or unregistered trademarks or trade names to brand and market itself and its products. Its trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. During trademark registration proceedings, LENZ may receive rejections of its applications by the USPTO or in other foreign jurisdictions. Although it is given an opportunity to respond to such rejections, LENZ may be unable to overcome them. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against LENZ's trademarks, which may not survive such proceedings.

LENZ may not be able to protect its rights to these trademarks and trade names, which LENZ needs to build name recognition among potential partners or customers in its markets of interest. At times, competitors may adopt trade names or trademarks similar to those of LENZ, thereby impeding its ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of LENZ's registered or unregistered trademarks or trade names. Over the long term, if it is unable to establish name recognition based on its trademarks and trade names, then LENZ may not be able to compete effectively and its business may be adversely affected. LENZ may license its trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how its trademarks and trade names may be used, a breach of these agreements or misuse of LENZ's trademarks and tradenames by its licensees may jeopardize its rights in or diminish the goodwill associated with its trademarks and trade names. LENZ's efforts

to enforce or protect its proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect its financial condition or results of operations.

In addition, any proprietary name LENZ proposes to use with its current or future product candidates in the United States must be approved by the FDA, regardless of whether LENZ has registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. If the FDA objects to any of its proposed proprietary product names, LENZ may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark.

Intellectual property rights do not necessarily address all potential threats to LENZ's competitive advantage.

The degree of future protection afforded by LENZ's intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect its business, or permit LENZ to maintain its competitive advantage. The following examples are illustrative:

- others may be able to make formulations or compositions that are the same as or similar to LENZ's current and future product candidates, but that are not covered by the pending patent applications or patents that LENZ owns or any pending patent applications or patents that it may in-license in the future;
- others may be able to make product that is similar to LENZ's current and future product candidates that LENZ intends to commercialize and that is not covered by the patents that it exclusively licensed and has the right to enforce;
- LENZ, any of its future licensors or collaborators might not have been the first to make the inventions covered by the issued patents or pending patent applications that LENZ owns or may in-license in the future;
- LENZ or any of its future licensors might not have been the first to file patent applications covering certain of its or those licensors' inventions;
- others may independently develop similar or alternative technologies or duplicate any of LENZ's technologies without infringing or otherwise violating its owned intellectual property rights or any patent applications that LENZ may license in the future;
- it is possible that LENZ's pending patent applications or those that it may own or license in the future will not lead to issued patents;
- issued patents that LENZ either owns or that it may license in the future may be revoked, modified or held valid or unenforceable, as a result of legal challenges by its competitors;
- issued patents that LENZ either owns or that it may license in the future may not provide it with any competitive advantages;
- others may have access to the same intellectual property rights licensed to LENZ in the future on a non-exclusive basis;
- LENZ's competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where LENZ does not have patent rights, and then use the information learned from such activities to develop competitive products for sale in LENZ's major commercial markets;

- LENZ may not develop additional proprietary technologies that are patentable;
- LENZ cannot predict the scope of protection of any patent issuing based on its or any future licensors' patent applications, including whether the patent applications that LENZ owns, or, in the future, in-licenses will result in issued patents with claims directed to its product candidates or uses thereof in the United States or in other foreign countries;
- the claims of any patent issuing based on LENZ's patent applications may not provide protection against competitors or any competitive advantages, or may be challenged by third parties;
- if enforced, a court may not hold that LENZ's patents are valid, enforceable or infringed;
- LENZ may need to initiate litigation or administrative proceedings to enforce and/or defend its patent rights which will be costly whether it wins or loses;
- LENZ may choose not to file a patent application in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent application covering such intellectual property;
- LENZ may fail to adequately protect and police its trademarks and trade secrets; and
- the patents of others may have an adverse effect on LENZ's business, including if others obtain patents claiming subject matter similar to or improving that covered by its patent applications.

Any collaboration or partnership arrangements that LENZ may enter into in the future may not be successful, which could adversely affect its ability to develop and commercialize its products.

Any future collaborations that LENZ enters into may not be successful. The success of its collaboration arrangements will depend heavily on the efforts and activities of its collaborators. Collaborations are subject to numerous risks, which may include that:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of LENZ's products or may elect not to continue or renew development or commercialization programs based on trial or test results, changes in LENZ's strategic focus due to the acquisition of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with LENZ's current and future product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- LENZ could grant exclusive rights to its collaborators that would prevent it from collaborating with others;
- collaborators may not properly maintain or defend LENZ's intellectual property rights or may use its intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate its intellectual property or proprietary information or expose LENZ to potential liability;
- disputes may arise between LENZ and a collaborator that causes the delay or termination of the research, development or commercialization of its current or future product candidates or that results in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future product candidates;

- collaborators may own or co-own intellectual property covering LENZ's products that results from it collaborating with them, and in such cases, LENZ would not have the exclusive right to develop or commercialize such intellectual property; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

If LENZ fails to comply with its obligations under any license, collaboration or other agreements, such agreements may be terminated, it may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting its product candidates.

LENZ may in the future license or otherwise acquire development or commercialization rights to current and future product candidates or data from third parties. If any future licensors fail to prosecute, maintain, enforce, and defend such patents, or lose rights to those patents, the rights LENZ has licensed may be reduced or eliminated, and its right to develop and commercialize future product candidates that may be subject of such licensed rights could be adversely affected. In spite of its efforts, any future licensors might conclude that LENZ is in material breach of obligations under its license agreements. If LENZ breaches any material obligations, or uses the intellectual property licensed to it in an unauthorized manner, it may be required to pay damages and the licensor may have the right to terminate the license, which could result in LENZ being unable to develop, manufacture, and sell products that are covered by the licensed technology or enable a competitor to gain access to the licensed technology. If such in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, LENZ's competitors will have the freedom to seek regulatory approval of, and to market, products identical to its product candidates and the licensors to such in-licenses could prevent LENZ from developing or commercializing product candidates that rely upon the patents or other intellectual property rights which were the subject matter of such terminated agreements. Any of these events could adversely affect LENZ's business, financial condition, results of operations, and prospects.

Disputes may arise between LENZ and its licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- either party's financial or other obligations under the license agreement;
- whether and the extent to which LENZ's technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- LENZ's right to sublicense patents and other rights under its collaborative development relationships to third parties;
- LENZ's diligence obligations with respect to the use of the licensed technology in relation to its development and commercialization of its product candidates, and what activities satisfy those diligence obligations;
- LENZ's right to transfer or assign the license;
- the inventorship or ownership of inventions and know-how resulting from the joint creation or use of intellectual property by any of LENZ's licensors and LENZ and its partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that LENZ licenses prevent or impair its ability to maintain its licensing arrangements on acceptable terms, LENZ may not be able to successfully develop and commercialize the affected product candidates, which would have a material adverse effect on its business.

In addition, certain of LENZ's current or future agreements with third parties may limit or delay its ability to consummate certain transactions, may impact the value of those transactions, or may limit its ability to pursue certain activities.

Further, LENZ or its current or future licensors, if any, may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Therefore, LENZ may miss potential opportunities to strengthen its patent position. It is possible that defects of form in the preparation or filing of LENZ's patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, ownership, claim scope, or requests for patent term adjustments. If its current or future licensors are not fully cooperative or disagree with LENZ as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation, prosecution, or enforcement of LENZ's patents or patent applications, such patents may be invalid and/or unenforceable, and such applications may never result in valid, enforceable patents. Any of these outcomes could impair LENZ's ability to prevent competition from third parties, which may have an adverse impact on its business.

In addition, even where LENZ has the right to control patent prosecution of patents and patent applications under a license from third parties, LENZ may still be adversely affected or prejudiced by actions or inactions of its predecessors or licensors and their counsel that took place prior to LENZ assuming control over patent prosecution.

LENZ's acquired technologies and current or future licensed technology may be subject to retained rights. Its predecessors or licensors may retain certain rights under their agreements with LENZ, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether its predecessors or future licensors limit their use of the technology to these uses, and LENZ could incur substantial expenses to enforce its rights to its licensed technology in the event of misuse.

If LENZ is limited in its ability to utilize acquired technologies or current or future licensed technologies, or if LENZ loses its rights to critical acquired or in-licensed technology, it may be unable to successfully develop, out-license, market and sell its products, which could prevent or delay new product introductions. LENZ's business strategy depends on the successful development of acquired technologies, and current or future licensed technology, into commercial products. Therefore, any limitations on its ability to utilize these technologies may impair LENZ's ability to develop, out-license or market and sell its product candidate.

LENZ may not be able to license or acquire new or necessary intellectual property rights or technology from third parties.

Because LENZ's development programs may in the future require the use of proprietary rights held by third parties, the growth of its business may depend in part on its ability to acquire, in-license, or use these third-party proprietary rights. Further, other parties, including LENZ's competitors, may have patents and have filed and are likely filing patent applications potentially relevant to its business. In order to avoid infringing these patents, LENZ may find it necessary or prudent to obtain licenses to such patents from such parties. The licensing or acquisition of intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that LENZ may consider attractive or necessary. These established companies may have a competitive advantage over LENZ due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive LENZ to be a competitor may be unwilling to assign or license rights to it. LENZ also may be unable to license or acquire third party intellectual property rights on terms that would allow it to make an appropriate return on its investment or at all. No assurance can be given that LENZ will be successful in licensing any additional rights or technologies from third parties. LENZ's inability to license the rights and technologies that it has identified, or that it may in the future identify, could have a material adverse impact on its ability to complete the development of its product candidates or to develop additional product candidates. Even if LENZ were able to obtain a license, it could be non-exclusive, thereby giving its competitors and other third parties access to the same technologies licensed to LENZ, and it could require LENZ to make substantial licensing and royalty payments. Failure to obtain any necessary rights or licenses may detrimentally affect

LENZ's planned development of its current or future product candidates and could increase the cost, and extend the timelines associated with the development of such other product candidates, and LENZ may have to abandon development of the relevant program or product candidate. Any of the foregoing could have a material adverse effect on LENZ's business, financial condition, results of operations and prospects.

LENZ may enter into license agreements in the future with others to advance its existing or future research or allow commercialization of its existing or future product candidates. These licenses may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which LENZ may wish to develop or commercialize its technology and product candidates in the future. In that event, LENZ may be required to expend significant time and resources to redesign its product candidates, or the methods for manufacturing them, all of which may not be feasible on a technical or commercial basis. If it is unable to do so, LENZ may be unable to develop or commercialize the affected product candidates, which could harm its business, financial condition, results of operations, and prospects significantly. LENZ cannot provide any assurances that third-party patents do not exist which might be enforced against its current manufacturing methods, product candidates, or future methods or product candidates resulting in either an injunction prohibiting their manufacture or future sales, or, with respect to their future sales, an obligation on LENZ's part to pay royalties and/or other forms of compensation to third parties, which could be significant.

Risks Related to LENZ's Regulatory Approval and Other Legal Compliance Matters

The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable. If LENZ is not able to obtain, or if there are delays in obtaining, required regulatory approvals for its product candidates, LENZ will not be able to commercialize, or will be delayed in commercializing, its product candidates, and its ability to generate revenue will be materially impaired.

LENZ's product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable foreign regulatory authorities. Before LENZ can commercialize any of its product candidates, it must obtain marketing approval.

Obtaining approval by the FDA and other comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. Further, securing regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority.

Prior to obtaining approval to commercialize any drug product candidate in the United States or abroad, LENZ must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or foreign regulatory agencies, that such product candidates are safe and effective for their intended uses. Results from preclinical studies and clinical trials can be interpreted in different ways. Even if LENZ believes the preclinical or clinical data for its product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that LENZ's data are insufficient for approval and require additional nonclinical, clinical or other data. Even if LENZ eventually completes clinical testing and receives approval for its product candidates, the FDA and other comparable foreign regulatory authorities may approve its product candidates for a more limited indication or a narrower patient population than LENZ originally requested or may impose other prescribing limitations or warnings that limit the product's commercial potential. The FDA may also require LENZ to conduct additional preclinical studies or clinical trials for its product candidates either prior to or after approval, or may object to elements of its

clinical development programs. LENZ has not submitted for, or obtained, regulatory approval for any product candidate, and it is possible that none of its product candidates will ever obtain regulatory approval. Further, development of LENZ's product candidates or regulatory approval may be delayed for reasons beyond its control.

Applications for LENZ's product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of its clinical trials;
- LENZ may be unable to demonstrate to the satisfaction of the FDA or other comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trial may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure efficacy and safety in the full population for which LENZ seeks approval;
- the FDA or other comparable foreign regulatory authorities may disagree with LENZ's interpretation of data from nonclinical studies or clinical trials;
- LENZ may be unable to demonstrate to the FDA or other comparable foreign regulatory authorities that its product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which LENZ contracts for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or other comparable foreign regulatory authorities may significantly change in a manner rendering LENZ's clinical data insufficient for approval or resulting in delays in their regulatory approval.

Of the large number of drugs in development, only a small percentage successfully complete the FDA or comparable foreign regulatory approval processes and are commercialized. The lengthy approval processes as well as the unpredictability of future clinical trial results may result in LENZ failing to obtain regulatory approval to market its product candidates, which would significantly harm its business, results of operations and prospects.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in LENZ failing to obtain regulatory approval to market any of its product candidates, which would significantly harm its business, results of operations and prospects. In addition, even if LENZ obtains approval of its product candidates, regulatory authorities may approve any of its product candidates for fewer or more limited indications than LENZ requests, may impose significant limitations in the form of narrow indications, warnings, or a risk evaluation and mitigation strategy ("REMS"). In addition, the FDA or comparable foreign regulatory authorities may change its policies, issue additional regulations or revise existing regulations, or take other actions, which may prevent or delay approval of LENZ's future products under development on a timely basis. Such policy or regulatory changes could impose additional requirements upon LENZ that could delay its ability to obtain approvals, increase the costs of compliance or restrict its ability to maintain any marketing authorizations it may have obtained.

LENZ's current or future product candidates may fail to demonstrate substantial evidence of the safety and efficacy or cause significant adverse events or other undesirable side effects may be identified during the development of its product candidates, which could prevent, delay or limit the scope of regulatory approval of its product candidates, prevent market acceptance, limit their commercial potential or result in significant negative consequences.

To obtain the requisite regulatory approvals for the commercial sale of its product candidates, LENZ must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that its product candidates are safe and effective for use in each target indication. Preclinical studies and clinical trials are expensive and time consuming, and its outcomes are inherently uncertain. Failures can occur at any time during the development process. Product candidates often fail to demonstrate safety or efficacy of the product candidate studied for the target indication, and most product candidates that begin clinical trials are never approved.

LENZ may fail to demonstrate with substantial evidence from adequate and well-controlled trials, and to the satisfaction of the FDA or comparable foreign regulatory authorities, that its product candidates are safe and effective for their intended uses.

If its product candidates are associated with undesirable side effects or have unexpected characteristics in nonclinical studies or clinical trials when used alone or in combination with other approved products or investigational new drugs, LENZ may decide or be required to perform additional clinical studies or to interrupt, delay or abandon its development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the clinical trial, or result in potential product liability claims. Any of these occurrences may prevent LENZ from achieving or maintaining market acceptance of the affected product candidate and may harm its business, financial condition and prospects significantly. Moreover, if LENZ elects, or is required, to not initiate, delay, suspend or terminate any future clinical trial of any of its product candidates, the commercial prospects of such product candidates may be harmed and LENZ's ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm its ability to develop other product candidates, and may harm its business, financial condition and prospects significantly.

Patients in LENZ's clinical trials may in the future suffer significant adverse events or other side effects not observed in its nonclinical studies or previous clinical trials. Some of its product candidates may be used as chronic therapies or be used in populations for which safety concerns may be particularly scrutinized by regulatory agencies. In addition, if its product candidates are used in combination with other therapies, LENZ product candidates may exacerbate adverse events associated with the therapy. Patients treated with its product candidates may also be undergoing separate treatments which can cause side effects or adverse events that are unrelated to LENZ's product candidates, but may still impact the success of its clinical trials, including, for example, by interfering with the effects of LENZ's product candidates.

If significant adverse events or other side effects are observed in any of its current or future clinical trials, LENZ may have difficulty recruiting patients to the clinical trials, patients may drop out of its clinical trials, or LENZ may be required to abandon the clinical trials or its development efforts of that product candidate altogether. LENZ, the FDA other comparable regulatory authorities or an IRB may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such clinical trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage clinical trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance due to its tolerability versus other therapies. Any of these developments could materially harm LENZ's business, financial condition and prospects.

Further, if any of its product candidates obtains marketing approval, and LENZ or others later identify adverse events or other side effects associated with such products, a number of potentially negative consequences could result, including:

- regulatory authorities may suspend, withdraw or limit approvals of that product, or seek an injunction against its manufacture or distribution;
- regulatory authorities may require additional warnings on the label;
- LENZ may decide to remove the product from the market;
- LENZ may be required to conduct post-marketing studies or change the way the product is administered;
- LENZ may be sued and held liable for harm caused to subjects or patients;
- LENZ may be subject to fines, injunctions or the imposition of criminal penalties; and
- LENZ's reputation and physician or patient acceptance of its products may suffer.

There can be no assurance that LENZ will resolve any issues related to any product-related adverse events to the satisfaction of the FDA or any foreign regulatory agency in a timely manner or at all. Moreover, any of these events could diminish the usage or otherwise limit the commercial success of its product candidates and prevent LENZ from achieving or maintaining market acceptance of the affected product, if approved by applicable regulatory authorities.

Additional time may be required to develop and obtain regulatory approval for LENZ's LNZ100 and LNZ101 product candidates because it expects they will be regulated as a drug-device combination product.

LENZ expects its LNZ100 and LNZ101 product candidates to be regulated as a drug-device combination product that will require coordination within the FDA and comparable foreign regulatory authorities and notified bodies for review of its drug and device components. Although the FDA and comparable foreign regulatory authorities and notified bodies have systems in place for the review and approval of drug-device combination products such as its LNZ100 and LNZ101 product candidates, LENZ may experience delays in the development, approval and commercialization of its product candidates due to regulatory timing constraints and uncertainties in the product development and approval process.

Obtaining and maintaining regulatory approval of its product candidates in one jurisdiction does not mean that LENZ will be successful in obtaining regulatory approval of its product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of its product candidates in one jurisdiction does not guarantee that LENZ will be able to obtain or maintain regulatory approval in any other jurisdiction. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and pricing of the product candidate in those countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional nonclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, the pricing of a prescription drug candidate is subject to regulatory approval before it can be approved for sale in that jurisdiction. In some cases, the price that LENZ intends to charge for its products is also subject to approval.

LENZ may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which it must comply

prior to marketing in those jurisdictions. Obtaining foreign regulatory approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for LENZ and could delay or prevent the introduction of its products in certain countries. If LENZ or any future collaborator fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, its target market will be reduced and its ability to realize the full market potential of its potential product candidates will be harmed.

Even if LENZ receives regulatory approval of its product candidates, it will be subject to ongoing regulatory obligations and continued regulatory oversight, which may result in significant additional expense and LENZ may be subject to penalties if it fails to comply with regulatory requirements or experience unanticipated problems with its product candidates.

Even if LENZ obtains any regulatory approval for one or more of its product candidates, such product candidates will be subject to ongoing regulatory requirements applicable to manufacturing, labeling, packaging, storage, advertising, promoting, sampling, record-keeping and submission of safety or other post-market information, among other things. Any regulatory approvals that LENZ receives for its product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS, limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or requirements that LENZ conducts potentially costly post-market testing and surveillance studies, including Phase 4 trials and surveillance to monitor the quality, safety and efficacy of the drug. An unsuccessful post-marketing study or failure to complete such a study could result in order to approve LENZ's product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance. LENZ will also have to comply with requirements concerning advertising and promotion for its products. Promotional communications with respect to prescription drug products are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, LENZ will not be allowed to promote its products for indications or uses for which they do not have approval, commonly known as off-label promotion. The holder of an approved NDA must submit new or supplemental applications and obtain prior approval for certain changes to the approved product, product labeling, or manufacturing process. A company that is found to have improperly promoted off-label uses of its products may be subject to significant civil, criminal and administrative penalties.

In addition, drug manufacturers are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the NDA or foreign marketing application. If LENZ, the FDA or a comparable foreign regulatory authority, discover previously unknown problems with LENZ's product candidates, such as adverse events of unanticipated severity or frequency, or problems with the facility where the drug manufactured or if a regulatory authority disagrees with the promotion, marketing or labeling of that drug, a regulatory authority may impose restrictions relative to that drug, the manufacturing facility or LENZ including requesting a recall or requiring withdrawal of the drug from the market or suspension of manufacturing.

Failure by LENZ to comply with applicable regulatory requirements following approval of any product candidates, may result in, among other things:

- restrictions on the marketing or manufacturing of its product candidates, withdrawal of the product from the market or voluntary or mandatory product recalls;
- manufacturing delays and supply disruptions where regulatory inspections identify observations of noncompliance requiring remediation;

- revisions to the labeling, including limitation on approved uses or the addition of additional warnings, contraindications or other safety information, including boxed warnings;
- imposition of a REMS, which may include distribution or use restrictions;
- requirements to conduct additional post-market clinical trials to assess the safety of the product;
- suspension or withdrawal of regulatory approvals;
- issuance of fines, untitled letters, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by LENZ or suspension or revocation of approvals;
- product seizure or detention, or refusal to permit the import or export of its product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of LENZ's product candidates. If LENZ is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if it is not able to maintain regulatory compliance, LENZ may lose any marketing approval that it may have obtained, and it may not achieve or sustain profitability. LENZ also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. It is difficult to predict how current and future legislation, executive actions, and litigation, including the executive orders, will be implemented, and the extent to which they will impact LENZ's business, its clinical development, and the FDA's and other agencies' ability to exercise their regulatory authority, including FDA's pre-approval inspections and timely review of any regulatory filings or applications LENZ submits to the FDA. To the extent any executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, LENZ's business may be negatively impacted.

Moreover, the FDA strictly regulates the promotional claims that may be made about drug products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant civil, criminal and administrative penalties. The occurrence of any event or penalty described above may inhibit LENZ's ability to commercialize its product candidates and generate revenue and could require it to expend significant time and resources in response and could generate negative publicity.

Disruptions at the FDA, the Securities and Exchange Commission and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, or otherwise prevent those agencies from performing normal business functions on which the operation of LENZ's business may rely, which could negatively impact its business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the Securities and Exchange Commission (the "SEC") and other government agencies on which LENZ's operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed or approved by necessary government agencies, which would adversely affect LENZ's business. If a prolonged

government shutdown or other disruption occurs, or if global health or other concerns prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities in a timely manner, it could significantly impact the ability of the FDA to timely review and process LENZ's regulatory submissions, which could have a material adverse effect on its business. Further, future government shutdowns or delays could impact LENZ's ability to access the public markets and obtain necessary capital in order to properly capitalize and continue its operations.

Separately, in response to the COVID-19 pandemic, the FDA announced its intention to postpone most inspections of foreign and domestic manufacturing facilities at various points. Even though the FDA has since resumed standard inspection operations of domestic facilities, if a prolonged government shutdown occurs, either for global health related reasons or other reasons, preventing the FDA or other regulatory authorities from conducting business as usual or conducting inspections, reviews or other regulatory activities, it could significantly impact the ability of the FDA to timely review and process LENZ's regulatory submissions, which could have a material effect on its business.

LENZ may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on its business and results of operations.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of LENZ's product candidates or any future product candidates, restrict or regulate post-approval activities and affect its ability to profitably sell a product for which it obtains marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact LENZ's business in the future by requiring, for example:

- changes to its manufacturing arrangements;
- additions or modifications to product labeling;
- the recall or discontinuation of its products; or
- additional record-keeping requirements, if any such changes were to be imposed on LENZ, could adversely affect the operation of its business.

LENZ's product candidates, if approved, will be directed to the out-of-pocket, cash-pay market in the United States, which it believes makes the market less sensitive to changes in insurance coverage and reimbursement. That said, changes in healthcare legislation and healthcare cost containment measures could impact the pricing of other products and procedures that compete with LENZ's product candidates, which can indirectly impact its pricing strategy and profitability. If a competitor treatment is covered by health plans or has a more favorable pricing for consumers, the pricing of LENZ's product candidates may be negatively impacted, which could have a material adverse effect on its ability to generate revenue and to attain profitability. Additionally, the out-of-pocket, cash-pay market for its patient population may be negatively impacted by other price increases and market conditions, including rising costs of other consumer goods, which patients may prioritize over any product candidates LENZ may commercialize.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "ACA"), was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA contained provisions that may reduce the profitability of drug products through, among other things, increased rebates for drugs reimbursed by Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs.

There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. In August 2022, Congress passed the Inflation Reduction Act of 2022 (the "IRA"), which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. HHS has and will continue to issue and update guidance as these programs are implemented. On August 29, 2023, CMS announced the list of the first ten drugs that will be subject to price negotiations. However, various industry stakeholders, including pharmaceutical companies, the U.S. Chamber of Commerce, and the Pharmaceutical Research and Manufacturers of America, have initiated lawsuits against the federal government asserting that the price negotiation provisions of the IRA are unconstitutional. The impact of these judicial challenges as well as future legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the government on LENZ and the pharmaceutical industry as a whole is unclear. The implementation of cost containment measures or other healthcare reforms may prevent LENZ from being able to generate revenue, attain profitability, or commercialize its product candidates if approved.

In addition, President Biden has issued multiple executive orders that have sought to reduce prescription drug costs. In February 2023, HHS also issued a proposal in response to an October 2022 executive order from President Biden that includes a proposed prescription drug pricing model that will test whether targeted Medicare payment adjustments will sufficiently incentivize manufacturers to complete confirmatory trials for drugs approved through FDA's accelerated approval pathway. Further, in response to the Biden administration's October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the CMS Innovation Center which will be evaluated on their ability to lower the cost of drugs, promote accessibility, and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future. Although a number of these and other proposed measures may require authorization through additional legislation to become effective, and the Biden administration may reverse or otherwise change these measures, both the Biden administration and Congress have indicated that they will continue to seek new legislative measures to control drug costs.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control prescription drug pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. A number of states are considering or have recently enacted state drug price transparency and reporting laws that could substantially increase LENZ's compliance burdens and expose it to greater liability under such state laws once LENZ begins commercialization after obtaining regulatory approval for any of its products. LENZ expects that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for its product candidates or additional pricing pressures.

LENZ's revenue prospects could be affected by changes in healthcare spending and policy in the United States and abroad. LENZ operates in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to healthcare availability, the method of delivery or payment for healthcare products and services could negatively impact its business, operations and financial condition.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. LENZ cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare or impose price controls may adversely affect:

- the demand for its product candidates, if LENZ obtains regulatory approval;
- LENZ's ability to set a competitive price that it believes is fair for its products;
- LENZ's ability to generate revenue and achieve or maintain profitability;
- the level of taxes that LENZ is required to pay; and
- the availability of capital.

The implementation of cost containment measures or other healthcare reforms may lower the pricing of competitor products or procedures, which in turn may constrain the pricing of its product candidates, if approved, and prevent LENZ from being able to generate revenue, attain profitability or commercialize its product candidates.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for biotechnology products. LENZ cannot be sure to what extent the trajectory of these legislative and regulatory proposals will be implemented by the federal and state governments, whether additional legislative changes will be enacted, whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of its product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject LENZ to more stringent product labeling and post-marketing testing and other requirements.

LENZ may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, and health information privacy and security laws, which could expose it to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Although LENZ expects that product candidates, if approved, will be directed to the out-of-pocket, cash-pay market in the United States, its current and future arrangements with healthcare professionals, clinical investigators, CROs, and customers may expose LENZ to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which it markets, sells and distributes its products for which it obtains marketing approval.

The laws that may affect LENZ's ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment, and exclusion from government healthcare programs.
- federal civil and criminal false claims laws, including the False Claims Act ("FCA"), which can be enforced through civil "qui tam" or "whistleblower" actions, and civil monetary penalty laws, impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal

government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. When an entity is determined to have violated the federal civil FCA, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs.

- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it.
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH"), and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates and their subcontractors that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions.
- the federal Physician Payments Sunshine Act, created under the ACA and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS information related to payments or other transfers of value made to covered recipients, including physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician healthcare professionals (such as physician assistants and nurse practitioners, among others), and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members.
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting

of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of available statutory exceptions and regulatory safe harbors, it is possible that some of LENZ's business activities, including its advisory board arrangements with physicians, some of whom receive stock or stock options as compensation for services provided, and any sales and marketing activities after a product candidate has been approved for marketing in the United States, could be subject to legal challenge and enforcement actions. If its operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to LENZ, it may be subject to significant civil, criminal, and administrative penalties, including, without limitation, damages, fines, disgorgement, imprisonment, additional reporting obligations and oversight if LENZ becomes subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of its operations, any of which could adversely affect its ability to operate its business and its results of operations.

LENZ's employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

LENZ is exposed to the risk that its employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers and vendors may engage in misconduct or other improper activities. Misconduct by these parties could include failures to comply with FDA regulations, provide accurate information to the FDA, comply with federal and state health care fraud and abuse laws and regulations, accurately report financial information or data or disclose unauthorized activities to LENZ. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Misconduct by these parties could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to LENZ's reputation. It is not always possible to identify and deter misconduct by these parties, and the precautions LENZ takes to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting it from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against LENZ, and it is not successful in defending itself or asserting its rights, those actions could have a significant impact on its business, including the imposition of significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings and the curtailment or restructuring of its operations.

If LENZ fails to comply with environmental, health and safety laws and regulations, it could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of its business.

LENZ is subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. LENZ's operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Its operations also produce hazardous waste products. LENZ generally contracts with third parties for the disposal of these materials and wastes. It cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from its use of hazardous materials, LENZ could be held liable for any resulting damages, and any liability could exceed its

resources. LENZ also could incur significant costs associated with civil or criminal fines and penalties. Although it maintains workers' compensation insurance to cover the company for costs and expenses LENZ may incur due to injuries to its employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. LENZ does not maintain insurance for environmental liability or toxic tort claims that may be asserted against it in connection with its storage or disposal of biological, hazardous or radioactive materials.

In addition, LENZ may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair its research, development or commercialization efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

LENZ is subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations and can face serious consequences for violations.

Among other matters, U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, which are collectively referred to as Trade Laws, prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of trade laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. LENZ has direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. LENZ also expects its non-U.S. activities to increase in time. It plans to engage third parties for clinical trials or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals and LENZ can be held liable for the corrupt or other illegal activities of its personnel, agents, or partners, even if it does not explicitly authorize or have prior knowledge of such activities.

Risks Related to LENZ's Reliance on Third Parties

LENZ relies, and expects to continue to rely, on third parties, including independent clinical investigators and CROs, to conduct, supervise and monitor certain aspects of its clinical trials and any future preclinical studies. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, LENZ may not be able to obtain regulatory approval for or commercialize its product candidates, or such approval or commercialization may be delayed, and its business could be substantially harmed.

LENZ has relied upon and plans to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct certain aspects of its prior preclinical studies and clinical trials and to monitor and manage data for its ongoing clinical programs.

LENZ relies on these parties for execution of its trials, and generally does not control their activities. Nevertheless, LENZ is responsible for ensuring that each of its studies and trials is conducted in accordance with the applicable clinical investigation plan and protocol, legal, regulatory and scientific standards, and its reliance on these third parties does not relieve LENZ of its regulatory responsibilities. LENZ and its third-party contractors and CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of its products candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If LENZ or any of these third parties or its CROs fail to comply with applicable GCPs, the clinical data generated in its clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require LENZ to perform additional clinical trials before approving its marketing applications. LENZ cannot assure you that upon inspection by a given regulatory authority, such

regulatory authority will determine that any of its clinical trials comply with GCP regulations. In addition, LENZ's clinical trials must be conducted with product produced under cGMP regulations. Its failure to comply with these regulations may require LENZ to repeat clinical trials, which would delay the regulatory approval process. Moreover, its business may be adversely affected if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Further, these investigators and CROs are not LENZ employees and it will not be able to control, other than by contract, the amount of resources, including time, which they devote to its product candidates and clinical trials. These third parties may also have relationships with other commercial entities, including LENZ's competitors, for whom they may also be conducting clinical trials or other product development activities, which could affect their performance on LENZ's behalf. If independent investigators or CROs fail to devote sufficient resources to the development of its product candidates, or if CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to its clinical protocols, regulatory requirements or for other reasons, LENZ's clinical trials may be extended, delayed or terminated and LENZ may not be able to obtain regulatory approval for or successfully commercialize its product candidates. As a result, LENZ's results of operations and the commercial prospects for its product candidates would be harmed, its costs could increase and its ability to generate revenues could be delayed or precluded entirely.

LENZ's CROs have the right to terminate their agreements with it in the event of an uncured material breach. In addition, some of its CROs have an ability to terminate their respective agreements with LENZ if it can be reasonably demonstrated that the safety of the subjects participating in its clinical trials warrants such termination, if LENZ makes a general assignment for the benefit of its creditors or if LENZ is liquidated. If any of its relationships with these third parties terminate, LENZ may not be able to timely enter into arrangements with alternative third parties or to do so on commercially reasonable terms, if at all. Switching or adding CROs involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact its ability to meet its desired clinical development timelines. Though LENZ intends to carefully manage its relationships with its CROs, there can be no assurance that it will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on its business, financial condition and prospects.

If any of its relationships with these third-party CROs terminate, LENZ may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact LENZ's ability to meet its desired clinical development timelines. Additionally, CROs may lack the capacity to absorb higher workloads or take on additional capacity to support its needs. Though it carefully manages its relationships with its CROs, there can be no assurance that LENZ will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on its business, financial condition and prospects.

LENZ contracts with third parties for the manufacture of its product candidates for its ongoing clinical trials, and expects to continue to do so for additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that LENZ will not have sufficient quantities of its product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair its development or commercialization efforts.

LENZ does not currently have the infrastructure or internal capability to manufacture supplies of its product candidates for use in development and commercialization. LENZ relies, and expect to continue to rely, on third party manufacturers for the production of its product candidates for its clinical trials under the guidance of members of LENZ's organization. Furthermore, the raw materials for its product candidates are sourced, in some cases, from a single-source supplier. If LENZ were to experience an unexpected loss of supply of any of its

product candidates or any of its future product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, LENZ could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials.

LENZ expects to continue to rely on third-party manufacturers for the commercial supply of any of its product candidates for which it obtains marketing approval. It may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if LENZ is able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture its product candidates according to LENZ's schedule, or at all, including if its third-party contractors give greater priority to the supply of other products over its product candidates or otherwise do not satisfactorily perform according to the terms of the agreements between LENZ and them;
- the reduction or termination of production or deliveries by suppliers, or the raising of prices or renegotiation of terms;
- the termination or nonrenewal of arrangements or agreements by its third-party contractors at a time that is costly or inconvenient for LENZ;
- the breach by the third-party contractors of their agreements with LENZ;
- the failure of third-party contractors to comply with applicable regulatory requirements;
- the failure of the third party to manufacture its product candidates according to LENZ's specifications;
- the mislabeling of clinical supplies, potentially resulting in the wrong dose amounts being supplied or active drug or placebo not being properly identified;
- clinical supplies not being delivered to clinical sites on time, leading to clinical trial interruptions, or of drug supplies not being distributed to commercial vendors in a timely manner, resulting in lost sales; and
- the misappropriation of LENZ's proprietary information, including its trade secrets and know-how.

LENZ does not have complete control over all aspects of the manufacturing process of, and is dependent on, its contract manufacturing partners for compliance with cGMP regulations for manufacturing both active drug substances and finished drug products. Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If its contract manufacturers cannot successfully manufacture material that conforms to its specifications and the strict regulatory requirements of the FDA, EMA or others, LENZ will not be able to secure and/or maintain marketing approval for its manufacturing facilities. In addition, LENZ does not have control over the ability of its contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of its product candidates or if it withdraws any such approval in the future, LENZ may need to find alternative manufacturing facilities, which would significantly impact its ability to develop, obtain marketing approval for or market its product candidates, if approved. LENZ's failure, or the failure of its third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on LENZ, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of its product candidates or drugs and harm its business and results of operations. LENZ's current and anticipated future dependence upon others for the manufacture of its product candidates or drugs may adversely affect its future profit margins and its ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

The manufacture of drugs is complex and LENZ's third-party manufacturers may encounter difficulties in production. If any of its third-party manufacturers encounter such difficulties, LENZ's ability to provide adequate supply of its product candidates for clinical trials or its products for patients, if approved, could be delayed or prevented.

Manufacturing drugs, especially in large quantities, is complex and may require the use of innovative technologies. Each lot of an approved drug product must undergo thorough testing for identity, strength, quality, purity, potency, and stability. Manufacturing drugs requires facilities specifically designed for and validated for this purpose, and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, LENZ may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of LENZ's manufacturer, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm LENZ's business. If its manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization as a result of these challenges, or otherwise, LENZ's development and commercialization efforts would be impaired, which would have an adverse effect on its business, financial condition, results of operations and growth prospects.

LENZ entered into a collaboration agreement with Ji Xing and depend on Ji Xing to develop and commercialize its products within Greater China. LENZ has limited control over how Ji Xing will conduct development and commercialization activities for LNZ100 or LNZ101.

In April 2022, LENZ entered into the Ji Xing License, pursuant to which LENZ granted Ji Xing an exclusive license to certain of its intellectual property rights to develop, use, import, and sell products containing LNZ100 or LNZ101 ("LNZ Products") for the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater China") and first right of negotiation for Ji Xing to license any other product that LENZ develops or commercialize containing aceclidine or brimonidine for uses outside of the treatment of presbyopia in Greater China. Under the terms of the Ji Xing License, LENZ shall refrain from developing or commercializing any competing product, or knowingly enabling a third party to develop or commercialize a product containing aceclidine or brimonidine that would reasonably be expected to result in off-label sales of such products, for the treatment of presbyopia in humans in Greater China.

As a result of the Ji Xing License Agreement, LENZ is dependent upon Ji Xing for the development, regulatory, and commercialization activities for LNZ Products in Greater China, and LENZ has limited control over the amount and timing of resources that Ji Xing devotes to such activities. In addition, payments associated with development, regulatory and commercial milestones that LENZ may be eligible to receive, as well as royalties, will be dependent upon further advancement of LNZ Products by Ji Xing. If these milestones are not met and no LNZ Products are commercialized in Greater China, LENZ will not receive future revenues from the collaboration. Ji Xing may fail to develop or effectively commercialize any LNZ Product for a variety of reasons and the Ji Xing License Agreement subjects LENZ to a number of risks, including:

- Ji Xing may not commit sufficient resources to the development, regulatory approval, marketing, or distribution of any LNZ Product;
- Ji Xing may be unable to successfully complete the clinical development of any LNZ Product or obtain all necessary approvals from foreign regulatory agencies in any of the Greater China territories required to market any LNZ Product;
- Ji Xing may develop or commercialize (or attempt to develop or commercialize) a LNZ Product in a manner that may adversely impact LENZ's development or commercialization of either such product candidate and/or future product candidates outside of such collaboration, including for example (1) the risk that any clinical trials conducted by Ji Xing may result in unfavorable safety or efficacy results that

negatively impact LENZ's ability to obtain regulatory approval of its products in jurisdictions outside Greater China and (2) the risk that, if approved and commercialized, patients report that the products developed by Ji Xing are not effective, or not effective for long enough, and it negatively impacts LENZ's ability to market any products outside Greater China, if approved;

- Ji Xing may not properly maintain LENZ's intellectual property rights or may use its proprietary information in such a way as to invite litigation that could jeopardize or invalidate LENZ's proprietary information or expose it to potential litigation;
- Ji Xing may terminate its agreement with LENZ prior to completing development or commercialization of any LNZ Product under the collaboration, in whole or in part, adversely impacting the potential approval and LENZ's revenue from the licensed product;
- Ji Xing may fail to manufacture any applicable LNZ Product in compliance with requirements of applicable foreign regulatory agencies and in commercial quantities sufficient to meet market demand;
- there may be disputes between LENZ and Ji Xing, including disagreements regarding the Ji Xing License Agreement, that may result in (1) the delay or prevention of the achievement of development, regulatory and commercial objectives that would result in milestone payments, (2) the delay or termination of the development or commercialization of any LNZ Product in Greater China, costly litigation or arbitration that diverts LENZ management's attention and resources and/or termination of the underlying agreement;
- Ji Xing may not comply with applicable regulatory guidelines with respect to developing or commercializing any LNZ Product, which could adversely impact the development of or sales thereof, either in Greater China or (depending on the scope of the noncompliant activities) by LENZ in other jurisdictions, and could result in administrative or judicially imposed sanctions, including warning letters, civil and criminal penalties, injunctions, product seizures or detention, product recalls, total or partial suspension of production and refusal to approve any new drug applications;
- Ji Xing may experience financial difficulties; and
- business combinations or significant changes in the business strategy of Ji Xing may also adversely affect its ability to perform its obligations under its license agreement with LENZ.

If Ji Xing does not perform in the manner LENZ expects or fulfill its responsibilities in a timely manner, or at all, the development, regulatory approval, and commercialization efforts related to a LNZ Product in Greater China could be delayed and it may be necessary for LENZ to either assume the responsibility at its own expense for the development of LNZ100 or LNZ101 in Greater China or seek out a different collaboration partner for such efforts. In that event, LENZ's potential to generate future revenues from the Greater China region could be significantly reduced and its business could be materially and adversely harmed.

Risks Related to LENZ's Business Operations

LENZ's success is highly dependent on its ability to attract and retain highly skilled executive officers and employees.

To succeed, LENZ must recruit, retain, manage and motivate qualified executives as it builds out the management team, and it faces significant competition for experienced personnel. LENZ is highly dependent on the principal members of its management and needs to add executives with operational and commercialization experience as it plans for commercialization of its product candidates and builds out a leadership team that can manage its operations as a public company. If it does not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect LENZ's ability to execute its business plan and harm its operating results. In particular, the loss of one or more of LENZ's executive officers could be detrimental to it if LENZ cannot recruit suitable replacements in a timely manner. The competition for qualified personnel in the biotechnology field is intense and as a result, LENZ may be unable to continue to attract and

retain qualified personnel necessary for the future success of its business. LENZ could in the future have difficulty attracting experienced personnel and may be required to expend significant financial resources in employee recruitment and retention efforts.

Many of the other biotechnology companies that LENZ competes against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than LENZ does. They also may provide more diverse opportunities and better prospects for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what LENZ has to offer. If LENZ is unable to continue to attract and retain high-quality personnel, the rate and success at which it can discover, develop and commercialize its product candidates will be limited and the potential for successfully growing its business will be harmed.

If LENZ engages in acquisitions, in-licensing or strategic partnerships, this may increase its capital requirements, dilute its stockholders, cause LENZ to incur debt or assume contingent liabilities and subject it to other risks.

LENZ may engage in various acquisitions and strategic partnerships in the future, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of equity securities which would result in dilution to its stockholders;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of management's attention from its existing product candidates and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel, and uncertainties in LENZ's ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- LENZ's inability to generate revenue from acquired intellectual property, technology and/or products sufficient to meet its objectives or even to offset the associated transaction and maintenance costs.

In addition, if LENZ undertakes such a transaction, it may incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

LENZ expects to significantly expand its organization, including building sales and marketing capability and creating additional infrastructure to support its operations as a public company, and as a result, LENZ may encounter difficulties in managing its growth, which could disrupt its operations.

LENZ expects to experience significant growth in the number of its employees and the scope of its operations, particularly in the areas of sales and marketing and finance and accounting. To manage its anticipated future growth, LENZ must continue to implement and improve its managerial, operational and financial systems, expand its facilities and continue to recruit and train additional qualified personnel. Due to LENZ's limited financial resources and its limited experience in managing such anticipated growth, LENZ may not be able to effectively manage the expansion of its operations or recruit and train additional qualified personnel. The expansion of its operations may lead to significant costs and may divert or stretch its management and business development resources in a way that LENZ may not anticipate. Any inability to manage growth could delay the execution of its business plans or disrupt its operations.

LENZ could be subject to securities class action litigation, which is expensive and could divert management attention.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for LENZ because pharmaceutical companies have experienced significant stock price volatility in recent years. If LENZ faces such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm its business, operating results, or financial condition.

LENZ's business and operations would suffer in the event of system failures.

LENZ's computer systems, as well as those of its contractors and consultants, are vulnerable to damage from computer viruses, unauthorized access, natural disasters (including hurricanes), terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in LENZ's operations, it could result in a material disruption of its product candidate development programs. For example, the loss of preclinical study or clinical trial data from completed, ongoing or planned trials could result in delays in regulatory approval efforts and significantly increase costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to its data or applications, or inappropriate disclosure of personal, confidential or proprietary information, LENZ could incur liability and the further development of its product candidates could be delayed.

The secure processing, maintenance and transmission of this information is critical to LENZ's operations. Despite its security measures, LENZ's information technology and infrastructure may be vulnerable to attacks by hackers or internal bad actors, or breached due to employee error, a technical vulnerability, malfeasance or other disruptions. Although, to LENZ's knowledge, it has not experienced any such material security breach to date, any such breach could compromise its networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, significant regulatory penalties, and such an event could disrupt LENZ's operations, damage its reputation, and cause a loss of confidence in LENZ and its ability to conduct clinical trials, which could adversely affect its reputation and delay clinical development of its product candidates.

Risks Related to the Combined Company

If any of the events described in "Risks Related to Graphite" or "Risks Related to LENZ" occur, those events could cause potential benefits of the merger not to be realized.

Following completion of the merger, the combined company will be susceptible to many of the risks described in the sections herein entitled "*Risks Related to Graphite*" and "*Risks Related to LENZ*." To the extent any of the events in the risks described in those sections occur, the potential benefits of the merger may not be realized and the results of operations and financial condition of the combined company could be adversely affected in a material way. This could cause the market price of the combined company's common stock to decline.

The market price of the combined company's common stock is expected to be volatile, and the market price of the common stock may drop following the merger.

The market price of the combined company's common stock following the merger could be subject to significant fluctuations. Some of the factors that may cause the market price of the combined company's common stock to fluctuate include:

- price and volume fluctuations in the overall stock market from time to time;
- the timing and results of clinical trials for its current product candidates and any future product candidates that it may develop;

- commencement or termination of collaborations for its product development and research programs;
- failure to achieve development, regulatory or commercialization milestones under its collaborations;
- failure or discontinuation of any of its product development and research programs;
- results of preclinical studies, clinical trials or regulatory approvals of product candidates of its competitors, or announcements about new research programs or product candidates of its competitors;
- the level of expenses related to any of its research programs, clinical development programs or product candidates that it may develop;
- the results of its efforts to develop additional product candidates or products;
- regulatory actions with respect to its products or those of its competitors;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- announced or completed acquisitions of businesses, products or intellectual property by the combined company or its competitors;
- actual or anticipated changes in the financial projections or development timelines it may provide to the public or its failure to meet those projections or timelines;
- market conditions in the biotechnology, pharmaceutical and ophthalmology sectors;
- changes in the structure of healthcare payment systems;
- sales of shares of its common stock by the combined company or its stockholders, or expectations that such sales may occur, and the expiration of market stand-off or lock-up agreements;
- the recruitment or departure of key personnel;
- the public's reaction to the combined company's press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving the combined company or other companies in its industry;
- fluctuations in the trading volume of the combined company's shares or the size of its public float;
- actual or anticipated changes or fluctuations in its results of operations;
- actual or anticipated developments in the combined company's business, its competitors' businesses or changes in the market valuations of similar companies and the competitive landscape generally;
- changes in the market valuations of similar companies;
- failure of securities analysts to maintain coverage of the combined company, changes in actual or future expectations of investors or securities analysts or its failure to meet these estimates or the expectations of investors;
- litigation involving the combined company, its industry or both;
- governmental or regulatory actions or audits;
- regulatory or legal developments in the United States and other countries;
- general economic conditions and trends;
- announcement or expectation of additional financing efforts;
- sales of securities by the combined company or its securityholders in the future
- if the combined company does not achieve the perceived benefits of the merger as rapidly or to the extent anticipated by financial or industry analysts; and
- changes in accounting standards, policies, guidelines, interpretations or principles.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of the combined company's common stock. In addition, a recession, depression or other sustained adverse market event could materially and adversely affect the combined company's business and the value of its common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against such companies. Furthermore, market volatility may lead to increased shareholder activism if the combined company experiences a market valuation that activists believe is not reflective of its intrinsic value. Activist campaigns that contest or conflict with the combined company's strategic direction or seek changes in the composition of its board of directors could have an adverse effect on its operating results, financial condition and cash flows.

The combined company may incur losses for the foreseeable future and might never achieve profitability.

The combined company may never become profitable, even if the combined company is able to complete clinical development for one or more product candidates and eventually commercialize such product candidates. The combined company will need to successfully complete significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, is expected to result in substantial increased operating losses for at least the next several years. Even if the combined company does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis.

Following the merger, the combined company may be unable to integrate successfully the businesses of Graphite and LENZ and realize the anticipated benefits of the merger.

The merger involves the combination of two companies which currently operate as independent companies. Following the merger, the combined company will be required to devote significant management attention and resources to integrating its business practices and operations. The combined company may fail to realize some or all of the anticipated benefits of the merger if the integration process takes longer than expected or is more costly than expected. Potential difficulties the combined company may encounter in the integration process include the following:

- the inability to successfully combine the businesses of Graphite and LENZ in a manner that permits the combined company to achieve the anticipated benefits from the merger, which would result in the anticipated benefits of the merger not being realized partly or wholly in the time frame currently anticipated or at all;
- creation of uniform standards, controls, procedures, policies and information systems; and
- potential unknown liabilities and unforeseen increased expenses, delays or regulatory conditions associated with the merger.

In addition, Graphite and LENZ have operated and, until the completion of the merger, will continue to operate independently. It is possible that the integration process also could result in the diversion of each company's management's attention, the disruption or interruption of, or the loss of momentum in, each company's ongoing businesses or inconsistencies in standards, controls, procedures and policies, any of which could adversely affect the combined company's ability to maintain its business relationships or the ability to achieve the anticipated benefits of the merger, or could otherwise adversely affect the business and financial results of the combined company.

If the combined company fails to attract and retain management and other key personnel, it may be unable to continue to successfully develop or commercialize its product candidates or otherwise implement its business plan.

The combined company's ability to compete in the highly competitive pharmaceuticals industry depends on its ability to attract and retain highly qualified managerial, scientific, medical, legal, sales and marketing and

other personnel. The combined company will be highly dependent on its management and scientific personnel. The loss of the services of any of these individuals could impede, delay, or prevent the successful development of the combined company's product pipeline, completion of its planned clinical trials, commercialization of its product candidates or in-licensing or acquisition of new assets and could impact negatively its ability to implement successfully its business plan. If the combined company loses the services of any of these individuals, it might not be able to find suitable replacements on a timely basis or at all, and its business could be harmed as a result. The combined company might not be able to attract or retain qualified management and other key personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses.

The combined company may need to raise additional financing in the future to fund its operations, which may not be available to it on favorable terms or at all.

The combined company may require additional funds to conduct the costly and time-consuming clinical efficacy trials necessary to pursue regulatory approval of each potential product candidate and to continue the development of LNZ100, LNZ101 and future product candidates. The combined company's future capital requirements will depend upon a number of factors, including: the number and timing of future product candidates in the pipeline; progress with and results from preclinical testing and clinical trials; the ability to manufacture sufficient drug supplies to complete preclinical and clinical trials; the costs involved in preparing, filing, acquiring, prosecuting, maintaining and enforcing patent and other intellectual property claims; and the time and costs involved in obtaining regulatory approvals and favorable reimbursement or formulary acceptance. Raising additional capital may be costly or difficult to obtain and could, for example, through the sale of common stock or securities convertible or exchangeable into common stock, significantly dilute its stockholders' ownership interests or inhibit the combined company's ability to achieve its business objectives. If the combined company raises additional funds through public or private equity offerings, the terms of these securities may include liquidation or other preferences that adversely the rights of its common stockholders. In addition, any debt financing may subject the combined company to fixed payment obligations and covenants limiting or restricting its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If the combined company raises additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, the combined company may have to relinquish certain valuable intellectual property or other rights to its product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to it. Even if the combined company were to obtain funding, there can be no assurance that it will be available on terms acceptable to the combined company or its stockholders.

The combined company's board of directors will be authorized to issue and designate shares of its convertible preferred stock in additional series without stockholder approval.

The combined company's amended and restated certificate of incorporation will authorize its board of directors, without the approval of its stockholders, to issue shares of convertible preferred stock, subject to limitations prescribed by applicable law, rules and regulations and the provisions of its amended and restated certificate of incorporation, as shares of convertible preferred stock in series, to establish from time to time the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions thereof. The powers, preferences and rights of these additional series of convertible preferred stock may be senior to or on parity with the combined company's common stock, which may reduce its value.

The combined company will incur additional costs and increased demands upon management as a result of complying with the laws and regulations affecting public companies.

The combined company will incur significant legal, accounting and other expenses as a public company that LENZ did not incur as a private company, including costs associated with public company reporting obligations

under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The combined company's management team will consist of the executive officers of LENZ prior to the merger, some of whom have not previously managed and operated a public company. These executive officers and other personnel will need to devote substantial time to gaining expertise related to public company reporting requirements and compliance with applicable laws and regulations to ensure that the combined company complies with all of these requirements. Any changes the combined company makes to comply with these obligations may not be sufficient to allow it to satisfy its obligations as a public company on a timely basis, or at all. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for the combined company to attract and retain qualified persons to serve on the board of directors or on board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

Upon completion of the merger, failure by the combined company to comply with the initial listing standards of Nasdaq will prevent its stock from being listed on Nasdaq.

Upon completion of the merger, Graphite, under the new name "LENZ Therapeutics, Inc.," will be required to meet the initial listing requirements to maintain the listing and continued trading of its shares on Nasdaq. These initial listing requirements are more difficult to achieve than the continued listing requirements. Pursuant to the Merger Agreement, Graphite agreed to use its commercially reasonable efforts to cause the shares of Graphite common stock being issued in the merger to be approved for listing on Nasdaq at or prior to the effective time of the merger. Based on information currently available to Graphite, Graphite anticipates that its stock will be unable to meet the $4.00 (or, to the extent applicable, $3.00) minimum bid price initial listing requirement at the closing of the merger unless it effects a reverse stock split. The board of directors of Graphite intends to effect a reverse stock split of the shares of Graphite common stock at a ratio in the range between 1:6 and 1:12. In addition, often times a reverse stock split will not result in a trading price for the affected common stock that is proportional to the ratio of the split. Following the merger, if the combined company is unable to satisfy Nasdaq listing requirements, Nasdaq may notify the combined company that its shares of common stock will not be listed on Nasdaq.

Upon a potential delisting from Nasdaq, if the common stock of the combined company is not then eligible for quotation on another market or exchange, trading of the shares could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it is likely that there would be significantly less liquidity in the trading of the common stock of the combined company; decreases in institutional and other investor demand for the shares, coverage by securities analysts, market making activity and information available concerning trading prices and volume; and fewer broker dealers willing to execute trades in the common stock of the combined company. Also, it may be difficult for the combined company to raise additional capital if the combined company's common stock is not listed on a major exchange. The occurrence of any of these events could result in a further decline in the market price of the common stock of the combined company and could have a material adverse effect on the combined company.

The combined company will continue to be an emerging growth company and a smaller reporting company, and it cannot be certain if the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies will make its common stock less attractive to investors.

Upon completion of the merger, it is expected that the combined company will continue to be an emerging growth company, as defined in the JOBS Act enacted in April 2012. For as long as the combined company continues to be an emerging growth company, it may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the "Sarbanes-Oxley Act"), reduced disclosure obligations regarding executive compensation in this proxy statement/prospectus and the combined company's periodic reports and proxy

statements, and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. The combined company will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of its initial public offering, (b) in which it has total annual gross revenue of at least $1.235 billion, or (c) in which the combined company is deemed to be a large accelerated filer, which requires, among other things, that the market value of the combined company's common stock that is held by non-affiliates to exceed $700 million as of the prior June 30th, and (2) the date on which the combined company has issued more than $1 billion in non-convertible debt during the prior three-year period.

Even after the combined company no longer qualifies as an emerging growth company, it may still qualify as a "smaller reporting company," which would allow the combined company to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act (if the combined company is also a non-accelerated filer at that time) and reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements. It cannot be predicted if investors will find the combined company's common stock less attractive because it may rely on these exemptions. If some investors find the combined company's common stock less attractive as a result, there may be a less active trading market for its common stock and its stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. It is expected that the combined company will elect to use this extended transition period under the JOBS Act. As a result, its financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make comparison of the combined company's financials to those of other public companies more difficult. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance, or the application of existing guidance to changes in the combined company's business could significantly affect its financial position and results of operations.

Once the combined company is no longer an emerging growth company, a smaller reporting company or otherwise no longer qualifies for applicable exemptions, the combined company will be subject to additional laws and regulations affecting public companies that will increase the combined company's costs and the demands on management and could harm the combined company's operating results and cash flows.

The combined company will be subject to the reporting requirements of the Exchange Act, which requires, among other things, that the combined company file with the SEC, annual, quarterly and current reports with respect to the combined company's business and financial condition as well as other disclosure and corporate governance requirements. However, as an emerging growth company, the combined company may take advantage of exemptions from various requirements such as an exemption from the requirement to have the combined company's independent auditors attest to the combined company's internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002 as well as an exemption from the "say on pay" voting requirements pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. The combined company will no longer qualify as an emerging growth company after December 31, 2026 (or upon such earlier time as it no longer meets the other applicable requirements). After the combined company no longer qualifies as an emerging growth company, the combined company may still qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Exchange Act, which may allow the combined company to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in this proxy statement/prospectus and in the combined company's periodic reports and proxy statements. Once the combined company is no longer an emerging growth company or a smaller reporting company or otherwise no longer qualifies for these exemptions, the combined company will be required to comply with these additional legal and regulatory requirements applicable to public companies and will incur significant legal, accounting and other expenses to do so. If the combined company is not able to comply with the requirements in a timely manner or at all, the combined company's financial condition or the market price of the combined company's common stock may be harmed.

For example, if the combined company or its independent auditor identifies deficiencies in the combined company's internal control over financial reporting that are deemed to be material weaknesses, the combined company could face additional costs to remedy those deficiencies, the market price of the combined company's stock could decline or the combined company could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

If the combined company fails to maintain proper and effective internal controls, its ability to produce accurate financial statements on a timely basis could be impaired.

Provided the combined company continues to be listed on Nasdaq, the combined company will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of Nasdaq. The Sarbanes-Oxley Act requires, among other things, that the combined company maintain effective disclosure controls and procedures and internal control over financial reporting. The combined company must perform system and process evaluation and testing of its internal control over financial reporting to allow management to report on the effectiveness of its internal controls over financial reporting in its Annual Report on Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. As a private company, LENZ has never been required to test its internal controls within a specified period. This will require that the combined company incur substantial professional fees and internal costs to expand its accounting and finance functions and that it expends significant management efforts. The combined company may experience difficulty in meeting these reporting requirements in a timely manner.

In addition to the matters described above in the context of LENZ being a private company, the combined company may discover weaknesses in its system of internal financial and accounting controls and procedures that could result in a material misstatement of its financial statements. The combined company's internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If the combined company is not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if it is unable to maintain proper and effective internal controls, the combined company may not be able to produce timely and accurate financial statements. If that were to happen, the market price of its common stock could decline and it could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities.

If the combined company is unable to maintain effective disclosure controls and procedures, its business, financial position and results of operations could be adversely affected.

If the merger is completed, the combined company will continue to be subject to the periodic reporting requirements of the Exchange Act. The combined company will need to design its disclosure controls and procedures to reasonably assure that information the combined company's must disclose in reports it files or submits under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Any disclosure controls and procedures or other internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the facts that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in the combined company's control system, misstatements due to error or fraud may occur and not be detected.

The unaudited pro forma condensed combined financial information for Graphite and LENZ included in this proxy statement/prospectus are preliminary, and the combined company's actual financial position and operations after the merger may differ materially from the unaudited pro forma financial information included in this proxy statement/prospectus.

The unaudited pro forma financial information for Graphite and LENZ included in this proxy statement/prospectus are presented for illustrative purposes only and is not necessarily indicative of the combined company's actual financial condition or results of operations of future periods, or the financial condition or results of operations that would have been realized had the entities been combined during the period presented. The combined company's actual results and financial position after the merger may differ materially and adversely from the unaudited pro forma financial information included in this proxy statement/prospectus. The Exchange Ratio reflected in this proxy statement/prospectus is preliminary. The final exchange ratio could differ materially from the preliminary Exchange Ratio used to prepare the pro forma adjustments. For more information see the section titled "*Unaudited Pro Forma Condensed Combined Financial Information*" beginning on page 388.

The combined company's certificate of incorporation and bylaws and provisions under Delaware law could make an acquisition of the combined company more difficult and may prevent attempts by its stockholders to replace or remove its management.

If the merger is completed, Graphite's bylaws, as amended in connection with the merger, and Graphite's charter, as amended by the amendment thereto attached to this proxy statement/prospectus as *Annex F*, assuming Proposal No. 2 is approved by Graphite stockholders at the Graphite special meeting, will become the combined company's bylaws and certificate of incorporation. Provisions that will be included in the combined company's certificate of incorporation and bylaws may discourage, delay or prevent a merger, acquisition or other change in control of the combined company that stockholders may consider favorable, including transactions in which its common stockholders might otherwise receive a premium price for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of the combined company's common stock, thereby depressing the market price of its common stock. In addition, because the combined company's board of directors will be responsible for appointing the members of the combined company's management team, these provisions may frustrate or prevent any attempts by the combined company's stockholders to replace or remove its current management by making it more difficult for stockholders to replace members of the combined company's board of directors. Among other things, these provisions:

- authorize "blank check" preferred stock, which could be issued by Graphite's board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to its common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of its stockholders can be called only by its board of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of Graphite's stockholders, including proposed nominations of persons for election to Graphite's board of directors;
- provide that vacancies on Graphite's board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- provide that Graphite's directors may be removed (i) only for cause and (ii) only by the affirmative vote of the holders of 75% or more of the outstanding shares of capital stock then entitled to vote at an election of directors;
- expressly authorize its board of directors to make, alter, amend or repeal its amended and restated bylaws; and

- require supermajority votes of the holders of its common stock to amend specified provisions of it amended and restated certificate of incorporation and amended and restated bylaws; however, if the Graphite board of directors recommends that the Graphite stockholders approve the amendment at a meeting of stockholders, the amendment shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment.

Moreover, because the combined company will be incorporated in Delaware, it is governed by the provisions of Section 203 of the DGCL, which prohibits stockholders owning in excess of 15% of the outstanding combined company voting stock from merging or combining with the combined company. Although Graphite and LENZ believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirors to negotiate with the combined company's board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by the combined company's stockholders to replace or remove then current management by making it more difficult for stockholders to replace members of the board of directors, which is responsible for appointing the members of management.

The bylaws of the combined company will provide that, unless the combined company consents in writing to the selection of an alternative forum, certain designated courts will be the sole and exclusive forum for certain legal actions between the combined company and its stockholders, which could limit its stockholders' ability to obtain a favorable judicial forum for disputes with the combined company or its directors, officers, employees or agents.

The bylaws of the combined company will provide that, unless it consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on the combined company's behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of its current or former directors, officers or employees to it or its stockholders; (iii) any action asserting a claim arising pursuant to any provision of the DGCL, its amended and restated certificate of incorporation or its bylaws (including their interpretation, validity or enforceability); or (iv) any action asserting a claim governed by the internal affairs doctrine. Unless the combined company consents in writing to the selection of an alternate forum, the United States federal district courts shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. In addition, the combined company's bylaws provides that any person or entity purchasing or otherwise acquiring any interest in shares of its capital stock is deemed to have notice of and consented to these exclusive forum provisions. The forum selection provisions in the combined company's bylaws may limit its stockholders' ability to litigate disputes with it in a judicial forum that they find favorable for disputes with the combined company or its directors, officers or employees, which may discourage the filing of lawsuits against the combined company and its directors, officers and employees, even though an action, if successful, might benefit the combined company's stockholders. In addition, these forum selection provisions may impose additional litigation costs for stockholders who determine to pursue any such lawsuits against the combined company.

Claims for indemnification by the combined company's directors and officers may reduce its available funds to satisfy successful third-party claims against the combined company and may reduce the amount of money available to it.

The combined company's certificate of incorporation and bylaws provide that it will indemnify its directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the Delaware General Corporation Law, the combined company's bylaws and the indemnification agreements that it plans to enter into with its directors and officers provide that:

- the combined company may, in its discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- the combined company is required to advance expenses, as incurred, to its directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;

- the combined company is not obligated pursuant to its bylaws to indemnify a person with respect to proceedings initiated by that person against the combined company or its other indemnitees, except with respect to proceedings authorized by its board of directors or brought to enforce a right to indemnification;
- the rights conferred in the combined company's bylaws are not exclusive, and it is authorized to enter into indemnification agreements with its directors, officers, employees and agents and to obtain insurance to indemnify such persons; and
- the combined company may not retroactively amend its bylaw provisions to reduce its indemnification obligations to directors, officers, employees and agents.

The combined company will indemnify its directors and officers for serving it in those capacities or for serving other business enterprises at its request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.

To the extent that a claim for indemnification is brought by any of the combined company's directors or officers, it would reduce the amount of funds available for use in its business.

Graphite and LENZ do not anticipate that the combined company will pay any cash dividends in the foreseeable future other than the special cash dividend that Graphite will declare and pay to the holders of record of outstanding shares of Graphite common stock as of a record date prior to the effective time of the merger, to be set by the Graphite board of directors as close as reasonably practicable to (but not later than) the anticipated closing date.

Other than the special cash dividend, the current expectation is that the combined company will retain its future earnings, if any, to fund the growth of the combined company's business as opposed to paying dividends. As a result, capital appreciation, if any, of the common stock of the combined company will be your sole source of gain, if any, for the foreseeable future.

An active trading market for the combined company's common stock may not develop and its stockholders may not be able to resell their shares of common stock for a profit, if at all.

Prior to the merger, there had been no public market for shares of LENZ capital stock. An active trading market for the combined company's shares of common stock may never develop or be sustained. If an active market for the combined company's common stock does not develop or is not sustained, it may be difficult for its stockholders to sell their shares at an attractive price or at all.

Graphite and LENZ may waive one or more of the conditions to the merger without recirculation of this proxy statement/prospectus or resoliciting stockholder approval.

Conditions to Graphite's and LENZ's obligations to complete the merger may be waived, in whole or in part, to the extent permitted by law, either unilaterally or by agreement of Graphite, LENZ and Merger Sub. In the event of a waiver of a condition, the Graphite board of directors will evaluate the materiality of any such waiver to determine whether an amendment to this proxy statement/prospectus and resolicitation of stockholder approval is necessary.

In the event that the Graphite board of directors, in its own reasonable discretion, determines any such waiver is not significant enough to require recirculation of this proxy statement/prospectus and resolicitation of its stockholders, it will have the discretion to complete the merger without seeking further stockholder approval, which decision may have a material adverse effect on the Graphite stockholders. For example, if Graphite and

LENZ agree to waive the requirement that the shares of Graphite common stock to be issued in the merger have been approved for listing (subject to official notice of issuance) on Nasdaq as of the closing, and their respective boards of directors elect to proceed with the closing, Nasdaq may notify the combined company of its determination to delist the combined company's securities based on the failure to satisfy the initial inclusion criteria in the Nasdaq application. The combined company may appeal the determination to a hearings panel, which will stay the delisting action pending a panel decision. If the combined company does not appeal the determination, its common stock will be delisted.

For more information about the conditions to the completion of the merger, see the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*."

Transfers of the combined company's securities utilizing Rule 144 of the Securities Act may be limited.

A significant portion of the combined company's securities are restricted from immediate resale. Holders should be aware that transfers of the combined company's securities pursuant to Rule 144 may be limited as Rule 144 is not available, subject to certain exceptions, for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. Graphite's disposal of its historical assets and operations in connection with its merger with LENZ will make Graphite subject to the SEC requirements applicable to reporting shell company business combinations. We anticipate that following the consummation of the merger, the combined company will no longer be a shell company. As a result, we anticipate that holders will not be able to sell their restricted combined company securities pursuant to Rule 144 without registration until one year after we file the Current Report on Form 8-K following the closing that includes the required Form 10 information that reflects we are no longer a shell company. For more information, see the section titled "*Securities Act Restrictions on Resale of Graphite Common Stock*" beginning on page 411 of this proxy statement/prospectus.

Graphite's disposal of its historical assets and operations in connection with its plan to merge with LENZ resulting in the conversion of LENZ into a public company shall make Graphite subject to the SEC requirements applicable to reporting shell company business combinations. As a result, the combined company will be subject to more stringent reporting requirements, offering limitations and resale restrictions.

According to SEC guidance, the requirements applicable to reporting shell company business combinations apply to any company that sells or otherwise disposes of its historical assets or operations in connection with or as part of a plan to combine with a non-shell private company in order to convert the private company into a public one. Graphite has no remaining ongoing development programs and Graphite has disposed of (or is in the process of disposing of) its legacy technology and intellectual property. As such, Graphite's plan to merge with LENZ resulting in the conversion of LENZ into a public company shall be subject to the SEC requirements applicable to reporting shell company business combinations, which are as follows:

- the combined company will need to file a Form 8-K to report the Form 10 type information after closing with the SEC reflecting its status as an entity that is not a shell company;
- the combined company will not be eligible to use a Form S-3 until 12 full calendar months after closing;
- the combined company will need to wait at least 60 calendar days after closing to file a Form S-8 for any equity plans or awards such as the 2024 Plan and the 2024 ESPP;
- the combined company will be an "ineligible issuer" for three years following the closing, which will prevent the combined company from (i) incorporating by reference in its Form S-1 filings, (ii) use a free writing prospectus, or (iii) take advantage of the well-known seasoned issuer (WKSI) status despite its public float;
- investors who (i) were affiliates of LENZ at the time the merger was submitted for the vote or consent of LENZ's stockholders, (ii) receive securities of the combined company in the merger (i.e.,

Rule 145(c) securities) and (iii) publicly offer or sell such securities will be deemed to be engaged in a distribution of such securities, and therefore to be underwriters with respect to resales of those securities, and accordingly such securities may not be included in the Form S-1 resale shelf registration statement anticipated to be filed after the closing of the merger unless such securities are sold only in a fixed price offering in which such investors are named as underwriters in the prospectus; and

- Rule 144(i)(2) will limit the ability to publicly resell Rule 145(c) securities per Rule 145(d), as well as any other "restricted" or "control" securities of the combined company per Rule 144 (e.g., holders of restricted securities and any affiliates of the public company are also affected) until one year after the Form 10 information is filed with the SEC.

The foregoing SEC requirements will increase the combined company's time and cost of raising capital, offering stock to under equity plans, and compliance with securities laws. Further, such requirements will add burdensome restrictions on the resale of combined company shares by affiliates of LENZ and any holders of "restricted" or "control" securities.

Future sales of shares by existing stockholders could cause the combined company's stock price to decline.

If existing securityholders of Graphite and LENZ sell, or indicate an intention to sell, substantial amounts of the combined company's common stock in the public market after legal restrictions on resale discussed in this proxy statement/prospectus lapse, the trading price of the common stock of the combined company could decline. Based on shares outstanding as of February 1, 2024, after giving effect to the estimated exchange ratio, the shares of LENZ common stock to be issued in the Graphite private placement and shares expected to be issued upon completion of the merger, the combined company is expected to have a total of approximately 191,441,000 shares of common stock outstanding immediately following the completion of the merger (before giving effect to the reverse stock split). Of the shares of common stock, approximately 100,276,877 shares will be available for sale in the public market beginning 180 days after the closing of the merger as a result of the expiration of lock-up agreements between Graphite and LENZ on the one hand and certain securityholders of Graphite and LENZ on the other hand. All other outstanding shares of common stock, other than shares held by affiliates of the combined company, shares of Graphite common stock issued in exchange for shares of LENZ common stock issued in the Graphite private placement and shares of Graphite common stock issued in the Graphite private placement, will be freely tradable, without restriction, in the public market. In addition, shares of common stock that are subject to outstanding options or warrants of LENZ will become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements and Rules 144 and 701 under the Securities Act. If these shares are sold, the trading price of the combined company's common stock could decline.

After completion of the merger, the combined company's executive officers, directors and principal stockholders will have the ability to control or significantly influence all matters submitted to the combined company's stockholders for approval.

Upon the completion of the merger and the Graphite private placement, and giving effect to the issuance of the shares of the combined company's common stock to LENZ securityholders and the PIPE investors, it is anticipated that the combined company's executive officers, directors and principal stockholders will, in the aggregate, beneficially own approximately 61% of the combined company's outstanding shares of common stock, subject to certain assumptions, including, but not limited to, Graphite's net cash as of closing being not less than $115 million or greater than $175 million. As a result, if these stockholders were to choose to act together, they would be able to control or significantly influence all matters submitted to the combined company's stockholders for approval, as well as the combined company's management and affairs. For example, these stockholders, if they choose to act together, would control or significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of the combined company's assets. This concentration of voting power could delay or prevent an acquisition of the combined company on terms that other stockholders may desire.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about the combined company, its business or its market, its stock price and trading volume could decline.

The trading market for the combined company's common stock will be influenced by the research and reports that equity research analysts publish about it and its business. Equity research analysts may elect to not provide research coverage of the combined company's common stock after the completion of the merger, and such lack of research coverage may adversely affect the market price of its common stock. In the event it does have equity research analyst coverage, the combined company will not have any control over the analysts or the content and opinions included in their reports. The price of the combined company's common stock could decline if one or more equity research analysts downgrade its stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of the combined company or fails to publish reports on it regularly, demand for its common stock could decrease, which in turn could cause its stock price or trading volume to decline.

The combined company will have broad discretion in the use of the cash and cash equivalents of the combined company and the proceeds from the Graphite private placement and may invest or spend the proceeds in ways with which you do not agree and in ways that may not increase the value of your investment.

The combined company will have broad discretion over the use of the cash and cash equivalents of the combined company and the proceeds from the Graphite private placement. You may not agree with the combined company's decisions, and its use of the proceeds may not yield any return on your investment. The combined company's failure to apply these resources effectively could compromise its ability to pursue its growth strategy and the combined company might not be able to yield a significant return, if any, on its investment of these net proceeds. You will not have the opportunity to influence its decisions on how to use the combined company's cash resources.

The combined company may be subject to adverse legislative or regulatory tax changes that could negatively impact its financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect the combined company or its stockholders. For example, the United States recently enacted the Inflation Reduction Act of 2022, which implements, among other changes, a 1% excise tax on certain stock buybacks. In addition, beginning in 2022, the Tax Cuts and Jobs Act of 2017 (the "Tax Act") eliminated the option to deduct research and development expenditures and required taxpayers to amortize them generally over five or fifteen years. The combined company will assess the impact of various tax reform proposals and modifications to existing tax treaties in all jurisdictions where the combined company has operations to determine the potential effect on its business and any assumptions the combined company will make about its future taxable income. It cannot predict whether any specific proposals will be enacted, the terms of any such proposals or what effect, if any, such proposals would have on its business if they were to be enacted. Such changes, among others, may adversely affect its effective tax rate, results of operation and general business condition.

The combined company's ability to use net operating loss carryforwards and other tax attributes may be limited, including as a result of the merger.

As of December 31, 2022 and 2021, Graphite had U.S. federal net operating loss carryforwards of $75.7 million and $57.3 million, respectively (which are not subject to expiration), and state net operating loss carryforwards of $3.2 million and $29 thousand, respectively (which begin to expire in various amounts in 2039). In addition, as of December 31, 2022, LENZ had state net operating loss carryforwards of $2.2 million (which begin to expire in 2040) and federal research and development credit carryforwards of $0.8 million (which begin to expire in 2042) and state research and development credit carryforwards of $0.4 million (which begin to expire in 2037).

Under current law, U.S. federal net operating loss carryforwards generated in taxable periods beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such net operating loss carryforwards is limited to 80% of taxable income for taxable periods beginning after December 31, 2020. It is uncertain if and to what extent various states will conform to federal law. In addition, under Sections 382 and 383 of the Code, U.S. federal net operating loss carryforwards and other tax attributes may become subject to an annual limitation in the event of certain cumulative changes in ownership. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points (by value) over their lowest ownership percentage within a rolling three-year period. Graphite may have experienced such ownership changes in the past, and Graphite is expected to experience an ownership change in connection with the merger and the Graphite private placement. In addition, the combined company's ability to utilize its net operating loss carryforwards and other tax attributes to offset future taxable income or tax liabilities may be limited as a result of ownership changes, including, as discussed above, in connection with the merger and the Graphite private placement or other transactions. Similar rules may apply under state tax laws. If the combined company earns taxable income, such limitations could result in increased future income tax liability to the combined company, and the combined company's future cash flows could be adversely affected.

Unfavorable global economic conditions could adversely affect the combined company's business, financial condition, results of operations or cash flows.

The combined company's results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn could result in a variety of risks to the combined company's business, including, weakened demand for the combined company's product candidates and the combined company's ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain the combined company's suppliers, possibly resulting in supply disruption, or cause the combined company's customers to delay making payments for its services. Any of the foregoing could harm the combined company's business and the combined company cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact its business.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This proxy statement/prospectus contains or incorporates statements that constitute forward-looking statements within the meaning of the federal securities laws in relation to Graphite, LENZ, the merger and the other proposed transactions contemplated thereby. Any express or implied statements that do not relate to historical or current facts or matters are forward-looking statements. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. These forward-looking statements include, but are not limited to, express or implied statements regarding Graphite's or LENZ's expectations, hopes, beliefs, intentions or strategies regarding the future. In some cases, you can identify forward-looking statements by terminology such as "may," "might," "will," "could," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "seeks," "target," "endeavor," "possible," "potential," "continue," "contemplate" or the negative of these terms or other comparable terminology, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements are based on current expectations and beliefs concerning future developments and their potential effects. There can be no assurance that future developments affecting Graphite, LENZ or the proposed transaction will be those that have been anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond Graphite's or LENZ's control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. In addition to other factors and matters contained in or incorporated by reference in this document, Graphite and LENZ believe the following factors could cause actual results to differ materially from those discussed in the forward-looking statements:

- the risk that the conditions to the closing of the transaction are not satisfied, including the failure to obtain stockholder approval for the transaction;
- the timing, receipt and terms and conditions of any required governmental or regulatory approvals of the merger that could cause the parties to abandon the merger;
- Graphite's and LENZ's ability to meet expectations regarding the timing and completion of the merger;
- the risk that the Graphite private placement is not completed in a timely manner or at all;
- uncertainties as to the timing and costs of the consummation of the transaction and the ability of each of Graphite and LENZ to consummate the transaction, including the Graphite private placement;
- statements regarding the special cash dividend that Graphite may pay to Graphite stockholders in connection with the completion of the merger;
- risks related to Graphite's continued listing on the Nasdaq Global Stock Market until closing of the proposed transaction;
- expectations regarding the strategies, prospects, plans, expectations and objectives of management of Graphite or LENZ for future operations of the combined company following the closing;
- the ability of the combined company to recognize the benefits that may be derived from the merger, including the commercial or market opportunity of, the product candidates of Graphite, LENZ and the combined company;
- risks related to Graphite's and LENZ's ability to correctly estimate their respective operating expenses and expenses associated with the transaction, uncertainties regarding the impact any delay in the closing would have on the anticipated cash resources of the combined company upon closing and other events and unanticipated spending and costs that could reduce the combined company's cash resources;
- the accuracy of the parties' estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the occurrence of any event, change or other circumstance or condition that could give rise to the termination of the Merger Agreement;

- the fact that under the terms of the Merger Agreement, Graphite is restrained from soliciting other acquisition proposals during the pendency of the merger, except in certain circumstances;
- the effect of the announcement or pendency of the merger on Graphite's or LENZ's business relationships, operating results and business generally, including disruption of Graphite's and LENZ's management's attention from ongoing business operations due to the merger and potential adverse reactions or changes to business relationships resulting from the announcement or completion of the transaction;
- the risk that the Merger Agreement may be terminated in circumstances that require Graphite to pay a termination fee;
- the outcome of any legal proceedings that may be instituted against Graphite, LENZ or any of their respective directors or officers related to the Merger Agreement or the transactions contemplated thereby;
- the ability of Graphite or LENZ to protect their respective intellectual property rights;
- competitive responses to the merger;
- legislative, regulatory, political and economic developments beyond the parties' control;
- the initiation, timing and success of clinical trials for Graphite's and LENZ's product candidates;
- success in retaining, or changes required in, Graphite's and LENZ's officers, key employees or directors;
- the need to hire additional personnel and ability to attract and retain such personnel;
- Graphite's public securities' potential liquidity and trading;
- the timing, scope and likelihood of regulatory filings and regulatory actions with respect to Graphite's and LENZ's product candidates or their respective competitors' products and product candidates;
- Graphite's and LENZ's plans and ability to manufacture its product candidates in conformity with the FDA's requirements and to scale up manufacturing of its product candidates to commercial scale, if approved;
- Graphite's and LENZ's reliance on third-party contract development and manufacturer organizations to manufacture and supply product candidates;
- the beneficial characteristics, and the potential safety, efficacy and therapeutic effects of Graphite's and LENZ's product candidates;
- the expected potential benefits of strategic collaborations with third parties and Graphite's and LENZ's ability to attract collaborators with development, regulatory and commercialization expertise;
- Graphite's and LENZ's plans and ability to successfully commercialize product candidates and, if approved, the rate and degree of market acceptance of such product candidates; and
- developments and projections relating to Graphite's and LENZ's competitors or industry.

Should one or more of these risks or uncertainties materialize, or should any of Graphite's or LENZ's assumptions prove incorrect, actual results may vary in material respects from those projected in these forward- looking statements. There may be additional risks that Graphite considers immaterial or which are unknown. You are urged to carefully review the disclosures Graphite and LENZ make concerning these risks and other factors that may affect Graphite's and LENZ's business and operating results under the section titled "*Risk Factors*" beginning on page 26 of this proxy statement/prospectus. Additional factors that could cause actual results to differ materially from those expressed in the forward-looking statements are discussed in reports filed with the SEC by Graphite and incorporated by reference herein. Please see the section titled "*Where You Can Find More Information*" beginning on page 432 of this proxy statement/prospectus. There can be no assurance that the merger will be completed, or if it is completed, that it will be completed within the anticipated time period or that the expected benefits of the merger will be realized.

If any of these risks or uncertainties materialize or any of these assumptions prove incorrect, the results of Graphite, LENZ or the combined company could differ materially from the forward-looking statements. Any public statements or disclosures by Graphite and LENZ following this proxy statement/prospectus that modify or impact any of the forward-looking statements contained in this proxy statement/prospectus will be deemed to modify or supersede such statements in this proxy statement/prospectus. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document and are qualified in their entirety by reference to the cautionary statements herein. Graphite and LENZ do not intend, and undertake no obligation, to update any forward-looking information to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events, unless required by law to do so.

THE SPECIAL MEETING OF GRAPHITE STOCKHOLDERS

Date, Time and Place

The Graphite special meeting will be held on March 14, 2024, commencing at 9:00 AM Pacific Time, unless adjourned or postponed to a later date. The Graphite special meeting will be held entirely online. Graphite is sending this proxy statement/prospectus to its stockholders in connection with the solicitation of proxies by Graphite's board of directors for use at the Graphite special meeting and any adjournments or postponements of the Graphite special meeting. This proxy statement/prospectus is first being furnished to Graphite stockholders on or about .

Purposes of the Graphite Special Meeting

The purposes of the Graphite special meeting are:

1. Approve (i) the issuance of shares of Graphite common stock, which will represent more than 20% of the shares of Graphite common stock outstanding immediately prior to the merger, to LENZ stockholders, pursuant to the terms of the Merger Agreement, a copy of which is attached as *Annex A* to the accompanying proxy statement/prospectus, pursuant to Nasdaq Listing Rule 5635(a), (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite common stock to the PIPE investors pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding as of the date of the execution of the Subscription Agreement;
2. Approve an amendment to the Graphite charter to (i) effect a reverse stock split of Graphite's issued common stock at a ratio in the range between 1:6 and 1:12, inclusive, with the final ratio and effectiveness of such amendment and the abandonment of all other ratios of such amendment to be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time and (ii) change Graphite's name to "LENZ Therapeutics, Inc.", effective as of the effective time under the Merger Agreement, in the form attached as *Annex F* to the accompanying proxy statement/prospectus;
3. Approve the 2024 Plan, which is the combined company's 2024 Equity Incentive Plan, in the form attached as *Annex G* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger;
4. Approve the 2024 ESPP, which is the combined company's 2024 Employee Stock Purchase Plan, in the form attached as *Annex H* to the accompanying proxy statement/prospectus, which will become effective as of and contingent on the completion of the merger; and
5. Approve an adjournment of the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal.

Each of Proposal Nos. 1, 2, 3 and 4 is a condition to completion of the merger. Therefore, the merger cannot be consummated without the approval of Proposal Nos. 1, 2, 3, and 4. None of the issuance of Graphite common stock in connection with the merger, the change of control of Graphite resulting from the merger, and the Graphite private placement (or Proposal No. 1), the amendment to the Graphite charter to effect a reverse stock split of issued Graphite common stock and to change Graphite's name (or Proposal No. 2), the adoption of the 2024 Plan (or Proposal No. 3), and the adoption of the 2024 ESPP (or Proposal No. 4), will take place unless Proposal Nos. 1, 2, 3 and 4 are each approved by Graphite stockholders and the reverse stock split is effected, the 2024 Plan and 2024 ESPP are adopted, and the merger is consummated.

Recommendation of the Graphite Board of Directors

- The Graphite board of directors has determined and declared the Merger Agreement and the transactions contemplated therein, including the issuance of shares of Graphite's common stock to the

LENZ stockholders pursuant to the Merger Agreement and the Graphite Support Agreements, as fair to, advisable and in the best interests of Graphite and its stockholders. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Nasdaq Stock Issuance Proposal as described in this proxy statement/prospectus.

- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the amendment to the Graphite charter to effect the reverse stock split and change Graphite's name as described in this proxy statement/prospectus and has approved such proposal. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Charter Amendment Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the 2024 Plan, which is the combined company's 2024 Equity Incentive Plan, as described in this proxy statement/prospectus. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the 2024 Plan Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and declared that it is advisable and in the best interests of Graphite and its stockholders to approve the 2024 ESPP, which is the combined company's 2024 Employee Stock Purchase Plan, as described in this proxy statement/prospectus. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the 2024 ESPP Proposal as described in this proxy statement/prospectus.
- The Graphite board of directors has determined and believes that adjourning the Graphite special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal is fair to, in the best interests of, and advisable to, Graphite and its stockholders and has approved and adopted the proposal. The Graphite board of directors unanimously recommends that Graphite stockholders vote "**FOR**" the Adjournment Proposal, if necessary, as described in this proxy statement/prospectus.

Record Date and Voting Power

Only holders of record of Graphite common stock at the close of business on the record date of January 29, 2024 are entitled to notice of, and to vote at, the Graphite special meeting. At the close of business on the record date, there were 19 registered holders of record of Graphite common stock and there were 58,230,156 shares of Graphite common stock issued and outstanding. Each share of Graphite common stock entitles the holder thereof to one vote on each matter submitted for stockholder approval.

Voting and Revocation of Proxies

The proxy accompanying this proxy statement/prospectus is solicited on behalf of the Graphite board of directors for use at the Graphite special meeting.

If, as of the record date referred to above, your shares were registered directly in your name with the transfer agent for Graphite common stock, Equiniti Trust Company, LLC, then you are a stockholder of record.

Whether or not you plan to attend the Graphite special meeting online, Graphite urges you to fill out and return the proxy card or vote by proxy over the telephone or on the internet as instructed below to ensure your vote is counted.

The procedures for voting are as follows:

If you are a stockholder of record, you may vote at the Graphite special meeting. Alternatively, you may vote by proxy by using the accompanying proxy card, over the internet or by telephone. Whether or not you plan to attend the Graphite special meeting, Graphite encourages you to vote by proxy to ensure your vote is counted.

Even if you have submitted a proxy before the Graphite special meeting, you may still attend the Graphite special meeting and vote. In such case, your previously submitted proxy will be disregarded.

If you are a Graphite stockholder of record, you may provide your proxy instruction in one of four different ways:

- You can vote using the proxy card. Simply complete, sign and date the accompanying proxy card and return it promptly in the envelope provided. If you return your signed proxy card before the Graphite special meeting, Graphite will vote your shares in accordance with the proxy card.
- You can vote by proxy over the internet by following the instructions provided on the proxy card.
- You can vote by proxy over the telephone by calling the toll-free number found on the proxy card.
- You may attend the Graphite special meeting online. Upon entry of your 16-digit control number which is included on your proxy card or on the instructions that accompanied your proxy materials. The control number is designed to verify your identity and allow you to vote your shares of Graphite common stock at the Graphite special meeting or to vote by proxy prior to the Graphite special meeting. If you attend the Graphite special meeting and vote via the Internet, your vote will revoke any proxy that you have previously submitted. Simply attending the Graphite special meeting will not, by itself, revoke your proxy.

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a voting instruction card and voting instructions with these proxy materials from that organization rather than from Graphite. Simply complete and mail the voting instruction card to ensure that your vote is counted. To vote at the Graphite special meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact your broker, bank or other agent to request a proxy form.

Graphite provides internet proxy voting to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

If you hold shares beneficially in street name and do not provide your broker or other agent with voting instructions, your shares may constitute "broker non-votes." A "broker non-vote" occurs when shares held by a broker that are represented at the meeting are not voted with respect to a particular proposal because the broker has not received voting instructions from its client(s) with respect to such shares on how to vote and does not have or did not exercise discretionary authority to vote on the matter. Broker non-votes, if any, will be treated as shares that are present at the Graphite special meeting for purposes of determining whether a quorum exists but, assuming a quorum is present, will not have any effect for the purpose of voting on Proposal Nos. 1 (Nasdaq Stock Issuance Proposal), 2 (Charter Amendment Proposal), 3 (2024 Plan Proposal), 4 (2024 ESPP Proposal) and 5 (Adjournment Proposal). If a Graphite stockholder does not return voting instructions to their broker on how to vote their shares of Graphite common stock, such broker may be prevented from voting, or may otherwise choose not to vote, such shares held by such broker, resulting in broker non-votes with respect to such shares. None of the proposals currently scheduled to be voted on at the Graphite special meeting are "routine" matters for which brokers have discretionary authority to vote. Accordingly, it is not expected that there will be any broker non-votes. To make sure that your vote is counted, you should instruct your broker to vote your shares of Graphite common stock, following the procedures provided by your broker.

All properly executed proxies that are not revoked will be voted at the Graphite special meeting and at any adjournments or postponements of the Graphite special meeting in accordance with the instructions contained in the proxy. **If a holder of Graphite common stock executes and returns a proxy and does not specify otherwise, the shares represented by that proxy will be voted "FOR" all of the proposals in accordance with the recommendation of Graphite's board of directors.**

If you are a stockholder of record of Graphite and you have not executed a Support Agreement, you may change your vote at any time before your proxy is voted at the Graphite special meeting in any one of the following ways:

- You may submit another properly completed proxy with a later date by mail or via the internet.
- You can provide your proxy instructions via telephone at a later date.
- You may send a written notice that you are revoking your proxy over the internet, following the instructions provided on the Notice of Internet Availability.
- You may attend the Graphite special meeting online and vote during the meeting by following the instructions at www.virtualshareholdermeeting.com/GRPH2024SM. Simply attending the Graphite special meeting will not, by itself, revoke your proxy and/or change your vote.

If your shares are held by your broker, bank or other agent, you should follow the instructions provided by them.

Required Vote

The presence at the Graphite special meeting of the holders of a majority of the shares of Graphite common stock outstanding and entitled to vote at the Graphite special meeting is necessary to constitute a quorum at the meeting. Abstentions and broker non-votes, if any, will be counted towards the presence of a quorum. The affirmative vote of a majority of the votes properly cast by the holders of Graphite common stock, assuming a quorum is present, is required for approval of Proposal Nos. 1, 2, 3, 4 and 5. Each of Proposal Nos. 1, 2, 3 and 4 is a condition to completion of the merger. Therefore, the merger cannot be consummated without the approval of Proposal Nos. 1, 2, 3, and 4. None of the issuance of Graphite common stock in connection with the merger, the change of control of Graphite resulting from the merger, and the Graphite private placement (or Proposal No. 1), the amendment to the Graphite charter to effect a reverse stock split of issued Graphite common stock and to change Graphite's name (or Proposal No. 2), the adoption of the 2024 Plan (or Proposal No. 3), and the adoption of the 2024 ESPP (or Proposal No. 4), will take place unless Proposal Nos. 1, 2, 3 and 4 are approved by Graphite stockholders and the reverse stock split is effected, the 2024 Plan and 2024 ESPP are adopted, and the merger is consummated.

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "FOR" and "AGAINST" votes, abstentions and broker non-votes. Broker non-votes, if any, will be treated as shares that are present at the Graphite special meeting for purposes of determining whether a quorum exists but, assuming a quorum is present, will not have any effect for the purpose of voting on Proposal Nos. 1 (Nasdaq Stock Issuance Proposal), 2 (Charter Amendment Proposal), 3 (2024 Plan Proposal), 4 (2024 ESPP Proposal), and 5 (Adjournment Proposal). None of the proposals currently scheduled to be voted on at the Graphite special meeting are "routine" matters for which brokers have discretionary authority to vote. Accordingly, it is not expected that there will be any broker non-votes.

As of February 1, 2024, the current directors and executive officers of Graphite owned or controlled 49.4% of the outstanding shares of Graphite common stock entitled to vote at the Graphite special meeting. As of February 1, 2024, the Graphite stockholders that are party to a Support Agreement, including the directors and certain executive officers of Graphite, owned an aggregate number of shares of Graphite common stock representing approximately 51% of the outstanding shares of Graphite common stock. Each stockholder that entered into a support agreement, including the directors and certain executive officers of Graphite, has agreed to vote all shares of Graphite common stock owned by him or her as of the record date in favor of the Graphite Stockholder Proposals.

Solicitation of Proxies

In addition to solicitation by mail, the directors, officers, employees and agents of Graphite may solicit proxies from Graphite stockholders by personal interview, telephone, email, fax or otherwise. Graphite and

LENZ will share equally the costs of printing and filing this proxy statement/prospectus and proxy card. Arrangements will also be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of Graphite common stock for the forwarding of solicitation materials to the beneficial owners of Graphite common stock. Graphite will reimburse these brokers, custodians, nominees and fiduciaries for the reasonable out of pocket expenses they incur in connection with the forwarding of solicitation materials. Graphite has retained Mackenzie to assist it in soliciting proxies using the means referred to above. Graphite will pay the fees of $8,500 plus reimbursement of out-of-pocket expenses.

Other Matters

As of the date of this proxy statement/prospectus, the Graphite board of directors does not know of any business to be presented at the Graphite special meeting other than as set forth in the notice accompanying this proxy statement/prospectus. If any other matters should properly come before the Graphite special meeting, it is intended that the shares represented by proxies will be voted with respect to such matters in accordance with the judgment of the persons voting the proxies.

THE MERGER

This section and the section titled "The Merger Agreement" beginning on page 203 of this proxy statement/ prospectus describe the material aspects of the merger and the Merger Agreement. While Graphite and LENZ believe that this description covers the material terms of the merger and the Merger Agreement, it may not contain all of the information that is important to you. You should read carefully this entire proxy statement/ prospectus for a more complete understanding of the merger and the Merger Agreement and the other documents to which you are referred in this proxy statement/prospectus. See the section titled "Where You Can Find More Information" beginning on page 432 of this proxy statement/prospectus.

Background of the Transaction

The following chronology summarizes the key meetings and events that led to the signing of the Merger Agreement. The following chronology does not purport to catalogue every conversation among the Graphite board of directors or committees thereof or the representatives of Graphite and other parties.

Prior to February 2023, Graphite was a clinical-stage, next-generation gene editing company focused on the development of nulabeglogene autogedtemcel ("nula-cel"), Graphite's lead product candidate designed to provide a highly differentiated approach with the potential to directly correct the mutation that causes sickle cell disease and restore normal adult hemoglobin (HgbA) expression. During this period, and in furtherance of this strategy, the Graphite board of directors and Graphite's management would, from time to time, review and discuss Graphite's business, financial condition, operations and strategic priorities and consider various strategic business initiatives intended to strengthen Graphite's business and enhance stockholder value. In particular, these discussions included the exploration of strategic relationships, collaborations and partnering opportunities with respect to the advancement and development of nula-cel and Graphite's pre-clinical non-genotoxic conditioning ("NGTC") program with a number of biotechnology and pharmaceutical companies. Graphite's management provided periodic updates regarding these discussions, including the discussions described below, to the Graphite board of directors.

On January 5, 2023, following a decision by the Graphite board of directors regarding its strategic direction, Graphite announced a voluntary pause of its Phase 1/2 CEDAR study of nula-cel, due to a serious adverse event in the first patient dosed, which Graphite concluded was likely related to study treatment.

On January 20 and 27, 2023, the Graphite board of directors held meetings at which members of Graphite's management and representatives of Goodwin Procter LLP ("Goodwin"), Graphite's outside legal counsel, were present. The Graphite board of directors and management discussed, among other things, the factors contributing to the voluntary pause of the nula-cel study and the strategic, financial and operational challenges associated with the pause. The Graphite board of directors and management also discussed projected timelines and anticipated costs necessary to make improvements to the nula-cel product and resume dosing patients. The Graphite board of directors and management also discussed the probability of technical success and the amount of time it would take before Graphite could generate sufficient nula-cel clinical data to raise additional capital, Graphite's cash runway and potential financing needs and the commercial viability of nula-cel if Graphite resumed the study and conducted a successful clinical trial given the expected increase in competition over time (with two gene therapies for sickle cell disease potentially being approved in the U.S. by December 2023). Following discussion, the Graphite board of directors directed Graphite's management to review Graphite's business, including the status of its programs, resources and capabilities and prepare a recommendation for the Graphite board of directors to consider. The Graphite board of directors also directed Graphite's management to assess whether the nula-cel or NGTC programs could have meaningful value as stand-alone programs or together as a whole. The Graphite board of directors determined that, in connection with these efforts, Graphite's management should commence a process to evaluate business development, strategic or other transactions regarding nula-cel and Graphite's NGTC program, related assets and intellectual property (including potential partnerships, licensing transactions and asset sales) and authorized Graphite's management to identify and engage in discussions with various third parties.

At the Graphite board of directors meeting held on January 27, 2023, the Graphite board of directors established a Strategic Transaction Committee of the Graphite board of directors (the "Transaction Committee"), for convenience (and not because of any actual or perceived conflicts of interests), in order to assist the Graphite board of directors, as needed, in exploring strategic alternatives, including without limitation, a sale or other divestiture, including a spin-out of all, substantially all or a material portion of Graphite's business or assets, a "reverse merger," "merger of equals" or similar transaction, or a sale of control of Graphite. The initial members of the Transaction Committee were the following independent directors, who were selected because they have significant experience with merger and acquisition transactions and/or clinical development: Abraham Bassan, Jerel Davis, Ph.D., Perry Karsen (Chair) and Smital Shah. The Graphite board of directors delegated authority to the Transaction Committee to, among other things: direct the process for the review and evaluation of any potential strategic transaction; provide guidance regarding a proposed strategic transaction to Graphite's management and advisors; identify and engage appropriate advisors in connection with such strategic transaction; review, evaluate, pursue or reject any potential transaction or counterparty; and recommend to the full Graphite board of directors what action, if any, should be taken by the Graphite board of directors and Graphite with respect to a potential strategic transaction or other alternatives. Between January 30, 2023 and the signing of the Merger Agreement, the Transaction Committee generally met weekly and on an ad hoc basis as needed, with representatives of its advisors present. Throughout the Transaction Committee's evaluation of a potential strategic transaction described below, the Transaction Committee conducted formal meetings, and its members were also in regular informal discussions with Graphite's management and legal and financial advisors and with each other. The Transaction Committee also routinely met in executive session without Graphite's management present.

Following its formation, the Transaction Committee and Graphite's management received presentations from representatives of Leerink Partners LLC ("Leerink Partners") and three other potential financial advisors. On January 30, 2023, the Transaction Committee, with the participation of other members of the Graphite board of directors, determined to engage Leerink Partners to act as its financial advisor in connection with the exploration of strategic alternatives on the financial terms described to the Transaction Committee, and authorized management to finalize the terms of the engagement letter with Leerink Partners. The Transaction Committee selected Leerink Partners as its financial advisor based on Leerink Partners' qualifications, reputation, experience and expertise in the biopharmaceutical industry, its knowledge of and involvement in recent transactions in the biopharmaceutical industry and its familiarity with Graphite and its business. The Transaction Committee also took into account Leerink Partners' status as an internationally recognized investment banking firm that has substantial experience in transactions similar to those that the Transaction Committee would potentially be considering. The Transaction Committee reviewed and discussed the terms of the engagement letter and subsequently approved entering into an engagement letter, dated February 24, 2023, between Graphite and Leerink Partners. During the course of the engagement of Leerink Partners, the Transaction Committee was advised as to potential conflicts of interest of Leerink Partners and concluded that there were no conflicts that would impair the ability of Leerink Partners to provide advisory services.

From January through June, 2023, as authorized by the Graphite board of directors, the Transaction Committee and members of Graphite's management engaged in preliminary discussions with approximately 16 companies to assess third party interest in an acquisition of, or potential business development transactions to share in the costs of development with respect to, one or more of nula-cel and/or NGTC assets and related intellectual property. These companies were primarily companies that Graphite identified as potentially interested in such transactions based on previous business development discussions Graphite had with such companies. During this time, 14 of these companies indicated potential interest following contact by Graphite, six of which conducted advanced diligence on the assets.

On January 30 and February 9, 2023, the Transaction Committee held meetings at which members of Graphite's management and representatives of Goodwin were present. Graphite's management provided updates on its assessment of the requirements to support the continuation of the nula-cel and NGTC programs and its discussions with parties potentially interested in a partnership involving those programs.

On February 15, 2023, members of Graphite's management and representatives of Leerink Partners held a meeting at which Graphite's management reviewed their preliminary, ongoing strategic discussions with third parties related to the nula-cel and/or NGTC assets, related intellectual property, and other potential strategic transactions.

On February 16, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Goodwin were present. This meeting was held to review, among other things, the future of the nula-cel program following the voluntary pause of its Phase 1/2 CEDAR study of nula-cel, as well as Graphite's NGTC program to determine if either or both of the programs could have meaningful value as stand-alone programs or together as a whole. Graphite's management reviewed its business development efforts to license, sell or otherwise partner the nula-cel and NGTC assets. The Graphite board of directors then reviewed each of its programs in various scenarios, including scenarios where Graphite would wind down the development of its other program and allocate all of its capital in continuing to pursue only nula-cel or NGTC alone, and the Graphite board of directors analyzed the ability and likelihood of Graphite to achieve technical success and capture value in each scenario. The Graphite board of directors first discussed nula-cel, including the factors contributing to the voluntary pause of the nula-cel study, the lack of third-party interest to date, the need to optimize the manufacturing of drug product, the competitive landscape of similar product candidates to treat sickle cell disease, investor interest and value perception for possible revised clinical trial designs for nula-cel, the possible development pathway and probability of success in relation to the requisite time and costs required and the overall potential return of value on the program. The Graphite board of directors next discussed NGTC, including the preclinical status of the program, the lack of third-party interest to date, development timelines and costs required. The Graphite board of directors concluded that the most likely value inflection point for the development of nula-cel would occur too late in Graphite's projected cash runway to allow for a refinance of Graphite. The Graphite board of directors further determined that, in the absence of an internally developed gene therapy, a significant partnership with a gene therapy company would be required to evaluate the NGTC asset clinically, and the pre-clinical data that would generate sufficient confidence to facilitate such a partnership was not expected until the end of 2023. The Graphite board of directors then determined neither nula-cel nor NGTC would have sufficient value to be the only asset of Graphite. The Graphite board of directors and management agreed to continue to explore options to license, sell or otherwise partner nula-cel and/or NGTC while pursuing other strategic alternatives for Graphite.

The Graphite board of directors considered various strategic alternatives, as well as the potential value of Graphite discontinuing all of its programs and focusing on cost preservation activities. The Graphite board of directors and management weighed the potential value that Graphite could deliver to stockholders in the event of a possible reverse merger or liquidation scenario, compared to the continued development of its programs. Following such discussion, the Graphite board of directors determined that nula-cel did not merit further development by Graphite, and, as such, that Graphite should discontinue its nula-cel program and other discovery and development activities, and focus its efforts on pursuing a possible reverse merger and, as a contingency plan, a liquidation or dissolution of Graphite. A reverse merger, which is a transaction in which a wholly owned Graphite subsidiary would merge with and into a privately held company with Graphite surviving as the parent company and the privately held company continuing as a wholly owned Graphite subsidiary, was considered to be the most desirable transaction structure to enhance stockholder value, given Graphite's cash position, its status as a public company, similar transactions recently completed with attractive merger partners and the termination of Graphite's nula-cel clinical development program. The Graphite board of directors considered the value that Graphite's public listing and access to public capital markets and cash might provide to a high-quality private company seeking to advance its own clinical programs or business by becoming a public company. Further, a reverse merger could provide Graphite stockholders with a meaningful stake in a combined organization possessing both promising clinical or commercial prospects and the means to pursue them, and provide an opportunity for long-term value creation for Graphite stockholders. The Graphite board of directors then discussed various considerations for the process of identifying counterparties for a possible reverse merger transaction, as well as a process for restructuring the organization. Representatives of Goodwin provided an overview of legal considerations in connection with a potential transaction, including the directors' fiduciary duties under Delaware law in the context of a strategic transaction (including mergers, acquisitions and dissolution), the management of any actual or potential conflicts, and the transaction process.

The Graphite board of directors also determined that, during the relative near term, Graphite should continue research activities associated with NGTC, with the goal of advancing toward one or more potential development candidates. Also at this meeting, a Graphite director, Matthew Porteus, M.D., disclosed that he was interested in pursuing a strategic transaction with Graphite to acquire or license nula-cel. In order to manage any potential or actual conflict of interests, the Graphite board of directors determined that Dr. Porteus would recuse himself from any discussions regarding negotiations of material terms for a possible transaction involving nula-cel. Dr. Porteus thereafter recused himself from substantive discussions during Graphite board of directors meetings regarding a possible transaction involving nula-cel.

The Graphite board of directors and management also determined that a significant reduction in force and mitigation of Graphite's facility lease obligations would be required as a result of Graphite's new strategic direction. Following discussion, the Graphite board of directors authorized Graphite's management to proceed with implementing various actions to preserve cash available, including by seeking to exit or sublease Graphite's office and laboratory facility at 233 East Grand Avenue in South San Francisco, CA (the "Bayside Lease") and implement a reduction in force intended to reduce Graphite's operational cash burn in an effort to maximize its strategic optionality and enhance stockholder value, on such timeline as Graphite's management deemed to be in Graphite's best interest. Following further discussion, the Graphite board of directors determined that Graphite should publicly announce the results of its business review and that Graphite was reviewing strategic alternatives.

On February 17, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. In connection with Graphite's pursuit of strategic alternatives, Leerink Partners provided an overview of its financial advisory expertise, as well as potential strategic transaction timelines, related activities, potential transaction structures and relevant precedents. The discussion covered a variety of topics, including the potential relevance of Graphite's net cash position, the impact of its existing Bayside Lease obligations, the potential criteria to be considered in selecting a potential reverse merger partner, and the role of the Transaction Committee in such process. The meeting participants also reviewed a list of prospective counterparties to a potential strategic transaction and Graphite's outreach activities and discussions with various prospective counterparties to date.

On February 22, 2023, Graphite announced that it had completed a review of its business, including the status of its programs, resources and capabilities. Graphite announced it decided to discontinue further development of nula-cel and to initiate a process to explore a range of strategic alternatives. Graphite also announced it was exploring the potential to continue nula-cel development externally. Graphite also announced its intention to continue research activities associated with NGTC, with the goal of advancing toward one or more potential development candidates. In addition, Graphite announced a corporate restructuring that would reduce its workforce by approximately 50%, among other actions to reduce cash burn while it explored strategic alternatives. During the months that followed this initial reduction in force, and as Graphite pursued strategic alternatives, the Graphite board of directors approved a second restructuring on August 18, 2023 that reduced Graphite's employee headcount by 70% of remaining employees.

Following the February 22, 2023 announcement through April 2023, as authorized by the Graphite board of directors and the Transaction Committee, representatives of Leerink Partners and Graphite's management contacted, or were contacted by, potential counterparties regarding their interest in a potential strategic transaction with Graphite. The Transaction Committee, Graphite's management and representatives of Leerink Partners considered an initial list of 135 private and public companies, which included inbound interest and select ongoing strategic discussions held by Graphite's management, that were potentially interested in a strategic transaction with Graphite. The companies were primarily privately-held biotechnology companies that were identified, or identified themselves, based on their need to obtain financing and/or their interest in becoming a public company with access to the public capital markets. Of the companies reviewed, the Transaction Committee and Graphite's management directed representatives of Leerink Partners, and in certain instances Graphite's management, to contact 51 of these companies based on their determination of the potential merits of a strategic transaction with each company. These potential counterparties were identified and selected following the Transaction Committee's qualitative consideration of the Criteria, as defined below, and the companies who were determined not to adequately meet the Criteria were not selected to be contacted. While LENZ was

included among the 51 companies in the initial outreach, LENZ declined interest at the time due to the fact that LENZ had just closed its Series B preferred stock financing, was focused on executing its Phase 3 clinical trials, and had yet to determine its future financing strategy to fund potential commercialization.

Of these 51 companies, representatives of Leerink Partners distributed 41 process letters requesting that such potential counterparties submit non-binding indications of interest with respect to a strategic transaction with Graphite. As to the remaining ten companies, they were also contacted, but did not receive process letters as they did not confirm interest in a potential strategic transaction. In addition, Graphite received one inbound process letter from a potential counterparty requesting that Graphite submit a non-binding indication of interest with respect to a strategic transaction with that potential counterparty. At the direction of the Graphite board of directors and the Transaction Committee, members of Graphite's management, members of the Transaction Committee, and Graphite's financial and legal advisors, conducted due diligence on multiple potential counterparties, focusing on strategic, scientific and clinical diligence, as well as competitive and other business factors. These advisors included external consultants, engaged by Graphite at the request of the Transaction Committee, who assisted with Graphite's due diligence. Of the 41 process letters sent by Leerink Partners to potential counterparties, 27 counterparties submitted non-binding indications of interest, and 19 of these counterparties (including Party A, Party B, Party C and Party D) executed customary mutual confidentiality agreements with Graphite (eight of which included customary standstill provisions that automatically terminated upon Graphite's announcement of the transaction with LENZ). During this time period, Graphite also submitted a non-binding indication of interest in response to the process letter it received from a potential counterparty. Later in March, at the direction of the Transaction Committee, Graphite management communicated to such counterparty that Graphite would no longer be exploring a potential strategic transaction with it based on the Transaction Committee's assessment of the likelihood of reaching mutually agreeable terms.

From March 7 through April 28, 2023, the Transaction Committee met nine times with members of Graphite's management, with representatives of Leerink Partners and Goodwin present. Representatives of Leerink Partners reviewed the status of outreach to potential counterparties and indications of interest received thus far. The Transaction Committee and Graphite's management, together with input from Leerink Partners, discussed and agreed upon the proposed criteria that would be used to evaluate any potential indications of interest, consisting of the following factors: the stage of development of the counterparty's product candidates; the attractiveness of the counterparty's technology and development pipeline; clinical data generated to date and scientific rationale for disease modification; regulatory path and interactions; the quality of management, board and investor base; potential value inflection milestones in the relative near term, including within the anticipated cash runway period following the closing of a transaction; readiness to be a U.S. publicly traded company, including the availability of audited financial statements; manufacturing process and impact on cost of goods; anticipated time to commercialization; commercial opportunity, including competitive differentiation, pricing, reimbursement and potential market share; intellectual property position; insider support for capitalizing the combined company in a concurrent financing; the combined company's financing needs following the completion of a transaction with Graphite; and the proposed relative valuations and pro forma ownership splits of the combined company's equity (collectively, the "Criteria").

The Transaction Committee and members of Graphite's management, together with input from Leerink Partners, also discussed that while the process letter sent to counterparties indicated that Graphite's projected available net cash balance at closing would be approximately in the range of $200 – 225 million, several of the potential counterparties inquired regarding the status of Graphite's Bayside Lease liability due to its potentially significant impact on Graphite's projected net cash position at closing, which impact was estimated to potentially reduce Graphite's projected net cash balance at closing by an amount in the range of $105 – 110 million if the lease was unable to be settled, reassigned, or subleased.

The Transaction Committee and members of Graphite's management, together with input from Leerink Partners, also discussed the status of their review of the indications of interest, both when compared to the Criteria and in light of information learned about the counterparties not included in the Criteria. After reviewing

all of the submitted indications of interest, the Transaction Committee selected 12 indications of interest to prioritize and invite to make management and due diligence presentations, including:

- The indication of interest from "Party A", a privately held biotechnology company developing cardiometabolic medicines, which was received on March 22, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $240 million (assuming closing net cash of $225 million) and an ascribed valuation of Party A of $200 million, with an implied ownership interest in the combined company of approximately 54.5% for existing Graphite stockholders. Party A's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party B", a privately held biotechnology company developing therapies to treat severe metabolic disorders, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $220 million (assuming closing net cash of $200 million) and an ascribed valuation of Party B of $220 million, with an implied ownership interest in the combined company of approximately 50% for existing Graphite stockholders, prior to any concurrent financing. Party B's proposal also contemplated a concurrent financing of $50 million, with participation from current Party B investors and new investors.
- The indication of interest from "Party C", a privately held biotechnology company developing oncology and immunology drugs, received on March 15, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $210 million (assuming closing net cash of $200 million) and an ascribed valuation of Party C of $425 million, with an implied ownership interest in the combined company of approximately 33% for existing Graphite stockholders. Party C's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party D", a publicly held biotechnology company developing medicines for immune system disorders, received on March 15, 2023, and which proposed a merger of equals transaction with an ascribed valuation of Graphite of $270-290 million (assuming closing net cash of $200-225 million) and an ascribed valuation of Party D of $300-400 million, with an implied ownership interest in the combined company of approximately 40-45% for existing Graphite stockholders, prior to any concurrent financing. Party D's proposal also contemplated a concurrent financing of $30-50 million.
- The indication of interest from "Party F", a privately held biotechnology company developing medicines for rare diseases and cancer, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of approximately $263 million (assuming closing net cash of approximately $213 million) and an ascribed valuation of Party F of approximately $232 million, with an implied ownership interest in the combined company of approximately 53% for existing Graphite stockholders. Party F's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party G", a privately held biotechnology company developing medicines for cancer, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $220 million (assuming closing net cash of $210 million) and an ascribed valuation of Party G of approximately $228 million, with an implied ownership interest in the combined company of approximately 49% for existing Graphite stockholders. Party G's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party H", a privately held biotechnology company developing medicines for cancer, received on March 22, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $205 million (assuming closing net cash of $200 million) and an ascribed valuation of Party H of approximately $615 million, with an implied ownership interest in the combined company of approximately 25% for existing Graphite stockholders, prior to any concurrent financing. Party H indicated that a financing at closing would not be necessary to fund the post-closing company, but that it was open to considering a financing related to the closing of the proposed reverse merger transaction to bring in select stockholders who had demonstrated interest in future financings for the company.

- The indication of interest from "Party I", a privately held biotechnology company developing medicines for inflammatory and autoimmune diseases, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Party I of approximately $275-325 million and, assuming Graphite's closing net cash of $200 million, with an implied ownership interest in the combined company of approximately 39-43% for existing Graphite stockholders. Party I's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party J", a privately held biotechnology company developing medicines for cancer, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $235 million (assuming closing net cash of $220 million) and an ascribed valuation of Party J of approximately $750-850 million, with an implied ownership interest in the combined company of approximately 22-24% for existing Graphite stockholders. Party J's proposal did not contemplate a concurrent financing. Party J withdrew from the process following their submission of an indication of interest.
- The indication of interest from "Party K", a privately held biotechnology company developing medicines for rare diseases and cancer, received on April 4, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $210 million (assuming closing net cash of $200 million) and an ascribed valuation of Party K of approximately $275 million, with an implied ownership interest in the combined company of approximately 43% for existing Graphite stockholders. Party K's proposal did not contemplate a concurrent financing
- The indication of interest from "Party L", a privately held biotechnology company developing medicines for inflammatory and neurodegenerative diseases, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $210 million (assuming closing net cash of $200 million) and an ascribed valuation of Party L of approximately $520 million, with an implied ownership interest in the combined company of approximately 29% for existing Graphite stockholders. Party L's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party M", a privately held biotechnology company developing medicines for autoimmune diseases, received on March 13, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $225 million (assuming closing net cash of $210 million) and an ascribed valuation of Party M of approximately $425 million, with an implied ownership interest in the combined company of approximately 35% for existing Graphite stockholders. Party M's proposal did not contemplate a concurrent financing.

During the meetings, and throughout the strategic review processes conducted by Graphite, the Graphite board of directors and the Transaction Committee reviewed potential conflicts between certain members of the Graphite board of directors and certain of the potential counterparties to a potential strategic transaction, including, in particular, noting that certain of Graphite's directors were affiliated with various investment funds that were investors in, and in some cases had board representation on, certain of the potential counterparties and, where appropriate to avoid potential conflicts or the appearance of potential conflicts, a particular director would recuse himself or herself from board and committee meetings (or relevant portions thereof) relating to, and any deliberations or discussions regarding, a possible transaction with that potential counterparty. In particular, the Transaction Committee noted Mr. Bassan's role as a principal at Samsara BioCapital and that Samsara BioCapital was an investor in certain of the other potential counterparties, including Party B. It was also noted that Dr. Davis is a managing director at Versant Ventures and Dr. Rizzuto is a managing director at Versant Ventures, and Versant Ventures is an investor in certain of the other potential counterparties. Further, it was noted that certain attorneys from Goodwin (although not those advising Graphite or the Transaction Committee) had provided legal services to certain of the potential counterparties and were outside legal counsel to Party A. Also, representatives of Leerink Partners provided the Transaction Committee with customary disclosures regarding any material relationships that Leerink Partners had with certain of the proposed counterparties. Representatives of Goodwin reviewed the fiduciary duties of the members of the Transaction Committee and the process by which any conflicted board members or advisors would be recused from certain discussions and decisions to approve a final strategic transaction counterparty in the event that a conflict was determined to exist.

At the Transaction Committee held on March 7, 2023, the Transaction Committee discussed that following Graphite's public announcement on February 22, 2023, EcoR1 Capital LLC ("EcoR1"), which together with its affiliates held approximately 14.67% of the outstanding Graphite common stock, confidentially requested that Graphite include a representative of EcoR1 as an observer to the strategic review process being conducted by Graphite. Following discussion, and based on EcorR1's substantial ownership interest in Graphite and its significant experience in the life sciences capital markets and with reverse mergers, the Transaction Committee decided to recommend to the Graphite board of directors that a representative of EcoR1 be invited to participate as an observer to the Transaction Committee. Also at this meeting, the Transaction Committee discussed the possibility of appointing additional members of the Graphite board of directors to the Transaction Committee who could assist the Transaction Committee with experience with merger and acquisition transactions and/or clinical development.

On March 17, 2023, the Graphite board of directors by unanimous written consent appointed as additional members of the Transaction Committee Joseph Jimenez and Jo Viney, Ph.D., both independent directors who have significant experience with merger and acquisition transactions and/or drug development. Also on March 17, 2023, the Graphite board of directors invited a representative of EcoR1 to participate as an observer to the Transaction Committee, pursuant to a letter agreement between Graphite and EcoR1, dated March 10, 2023, that contained customary confidentiality provisions.

Beginning on March 20, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners requested each of the 12 counterparties identified by the Transaction Committee to make presentations to the Transaction Committee and Graphite's management, and to otherwise be available for due diligence sessions with Leerink Partners, the Transaction Committee, Graphite's management and its legal advisors. Prior to the commencement of the presentations, Party J voluntarily withdrew from the process. At the direction of the Transaction Committee, Leerink Partners informed the other potential counterparties that had submitted indications of interest but who were not invited to make presentations that they were not advancing to the next stage of discussions based on determinations by the Transaction Committee.

On March 23, 2023, the Graphite board of directors (excluding Dr. Porteus) held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present, to receive an update on the process to license or partner the nula-cel and NGTC assets. Graphite's management reported that each of the third parties contacted indicated that they were not interested in pursuing a partnership for nula-cel and/or NGTC on terms favorable to Graphite due to, among other things, the early-stage nature of the assets and/or not having sufficient interest in funding clinical development of the assets, and certain of these companies expressed a desire to review (i) clinical data demonstrating safety and efficacy prior to considering a partnership for nula-cel or (ii) pre-clinical ablation and/or engraftment data in non-human primates for NGTC. Based in part on this feedback, the Graphite board of directors determined that a third party transaction for nula-cel or NGTC before it had such data was unlikely to generate sufficient value to Graphite. Graphite's management also reported that Dr. Porteus had expressed an interest in pursuing a partnership agreement for the nula-cel assets. The Graphite board of directors provided feedback to Graphite's management and its advisors on these matters, and directed Graphite's management and its advisors to negotiate with Dr. Porteus regarding a potential partnership transaction for the nula-cel assets. The Graphite board of directors agreed that Dr. Porteus would continue to be recused from discussions and decisions relating to a potential transaction involving nula-cel.

From March 24 through April 13, 2023, each of the 11 potential counterparties (including Party A, Party B, Party C and Party D) met with and presented their corporate presentation to the Transaction Committee, Graphite's management and representatives of Leerink Partners.

From March 24 through May 30, 2023, as directed by the Graphite board of directors, Graphite's management had discussions with Dr. Porteus and outside legal counsel for a newly formed entity affiliated with Dr. Porteus, which would become Kamau Therapeutics, Inc. ("Kamau"), regarding a possible transaction for Kamau to acquire or license Graphite's nula-cel intellectual property.

On March 31, April 6 and April 14, 2023, the Transaction Committee met with members of Graphite's management, with representatives of Leerink Partners and Goodwin present. During the meetings, the Transaction Committee and Graphite's management reviewed their diligence of the 11 prioritized counterparties, including feedback following their corporate presentations. In particular, the Transaction Committee decided to terminate discussions with a number of these counterparties because, following extensive management presentations and due diligence, the Transaction Committee determined that such counterparties were unlikely to meet a sufficient number of the Criteria, particularly related to the attractiveness of their technology, development pipeline and the likelihood and timing of approval of their respective product candidates. At the direction of the Transaction Committee, Graphite's management continued to diligence and evaluate Party A, Party B, Party C and Party D following these meetings.

On April 24, 2023, based on further evaluation, the Transaction Committee decided to deprioritize Party D and directed Graphite management to continue evaluating Party A, Party B and Party C.

Also on April 24, 2023, as authorized by the Graphite board of directors, Graphite's management sent Kamau's legal counsel a draft of a non-binding letter of intent (the "LOI") for the license and option to acquire the intellectual property related to nula-cel. The LOI proposed granting Kamau an option to acquire all of the intellectual property rights related to the nula-cel program subject to Kamau raising at least $20 million from new investors. The LOI also proposed that, if Kamau raised at least $20 million from new investors, including at least one venture capital firm or a similar institutional investor, Graphite would invest up to $10 million in cash and in-kind services (subject to certain adjustments) on the same terms as the new investors.

On April 28, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Members of the Transaction Committee and representatives of Leerink Partners provided an update on the strategic alternatives review process. Representatives of Goodwin reviewed with the directors their fiduciary duties under Delaware law and related process considerations. The Graphite board of directors reviewed potential actual or perceived conflicts between certain members of the Graphite board of directors and certain members of the potential counterparties to a potential strategic transaction. Further, it was noted that certain attorneys from Goodwin (although not those advising Graphite or the Transaction Committee) were outside counsel to Party A, and that the Transaction Committee had engaged alternative outside legal counsel that did not have any relationships with Party A to represent Graphite in a potential transaction with Party A (referred to as "transaction counsel").

Representatives of Leerink Partners reviewed the status of discussions with each of the potential counterparties that the Transaction Committee, with input from Graphite's management, had identified as a priority based on the Criteria, including Party A, Party B and Party C. The participants focused on the potential counterparties' strengths and weaknesses with respect to fundraising ability, valuations, product candidate viability, potential data readouts, competition and other Criteria. In the course of the discussion, the Graphite board of directors eliminated many of the indications of interest received as not viable, based on the Criteria. The Graphite board of directors directed representatives of Leerink Partners to provide guidance to Party B that its proposed valuation of Party B, based on the Graphite board of directors' assessment of Party B, was not competitive and that it should consider revising its proposal. The meeting participants also discussed other potential strategic alternatives, including a liquidation or dissolution of Graphite. Following such discussions, the Graphite board of directors indicated its support for the Transaction Committee, Graphite's management and representatives of Leerink Partners to prioritize engaging in additional due diligence and discussions with each of Party A and Party B, while continuing to engage with Party C. At the direction of the Graphite board of directors, representatives of Leerink Partners informed Party D that Graphite was prioritizing discussions with other parties.

Beginning on May 1, 2023, the Transaction Committee, Graphite's management and representatives of Leerink Partners conducted additional due diligence on Party A and Party B. This additional due diligence included holding videoconferences with counterparty management, evaluating answers to submitted questions and reviewing the contents of counterparty virtual data rooms. Also during this time, as directed by the Graphite

board of directors, representatives of Leerink Partners advised Party B to improve its proposal on valuation and to incorporate a cash dividend into the proposal that would allow Graphite to return some capital to its stockholders, but allow the combined company in a potential transaction between Party B and Graphite to be appropriately capitalized on a pro forma basis.

On May 4, 2023, Dr. Porteus and Kamau's legal counsel proposed to Graphite and Goodwin that rather than pursue the LOI, Kamau was interested in entering into an assignment agreement with Graphite to provide for an assignment of the intellectual property related to nula-cel as opposed to a license with an option to purchase the intellectual property if certain conditions were met. In connection with this, Kamau's legal counsel provided a draft assignment agreement to Graphite.

From May 4 through May 11, 2023, Graphite's management and representatives of Goodwin had discussions with the Transaction Committee regarding the proposed transaction with Kamau. The Transaction Committee provided feedback and direction to Graphite's management and Goodwin on this matter.

On May 5, 2023, Party B sent a revised non-binding indication of interest, which proposed a reverse merger transaction with an ascribed valuation of Graphite of $75 million (assuming closing net cash of $230 million, with reductions for a $75 million cash dividend to pre-closing Graphite stockholders and an $80 million lease liability) and an ascribed valuation of Party B of $150 million, with an implied ownership interest in the combined company of approximately 33% for existing Graphite stockholders, prior to any concurrent financing. Party B's proposal also contemplated a concurrent financing of $75 million, with participation from existing Party B investors and new investors.

From May 5 through May 12, 2023, the Transaction Committee met three times with members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel present. Representatives of Leerink Partners and Graphite's management provided updates on the strategic alternative review process, including an overview of the due diligence process and possible timeline for transactions with Party A, Party B and Party C. The meeting participants discussed their evaluation of Party A, Party B and Party C based upon the counterparties' presentations and additional due diligence conducted by Graphite's management. Following discussion at the Transaction Committee meeting held on May 5, 2023, the Transaction Committee determined to deprioritize Party C based, among other things, on the timing of its data catalysts and relevant competitive catalysts. Following discussion at the Transaction Committee meeting held on May 12, 2023, the Transaction Committee determined that Party A was the lead candidate for a potential reverse merger transaction based upon the evaluation guidelines outlined in the Criteria, and that Party B should be deprioritized.

On May 5, 2023, as directed by the Transaction Committee, representatives of Leerink Partners informed Party C that Graphite was prioritizing discussions with other parties.

On May 8, 2023, Samsara BioCapital informed Graphite's management that it was interested in purchasing certain NGTC assets.

On May 10, 2023, as directed by the Transaction Committee, representatives of Leerink Partners informed Party A that its proposed valuation would need to be reduced from its initial proposal and discussed the receptivity to a cash dividend in the transaction.

On May 11, 2023, as directed by the Transaction Committee, representatives of Goodwin informed Kamau's legal counsel that Graphite would not agree to an initial assignment of the nula-cel intellectual property to Kamau, but instead proposed to grant Kamau an exclusive license to the relevant intellectual property in return for an equity grant with a condition that if Kamau raised at least $20 million of financing the license would convert into a full assignment. Additionally, if Kamau was not able to raise the required financing within 60 days of execution of the agreement, the license would terminate.

On May 12, 2023, as directed by the Transaction Committee, representatives of Leerink Partners informed Party B that Graphite was prioritizing discussions with another party due to Party B's proposal on valuation.

On May 15, 2023, as directed by the Transaction Committee, representatives of Leerink Partners sent a counterproposal to Party A which detailed a proposed reverse merger transaction with an ascribed value to Party A of $120 million, with an implied ownership interest in the combined company of approximately 51% for Party A equityholders and an ascribed valuation of Graphite of $117 million, with an implied ownership interest in the combined company of approximately 49% for existing Graphite equityholders. The Graphite valuation was based on (i) $115 million of net cash at closing, plus (ii) a non-cash enterprise value of $15 million, plus (iii) $56 million credit for the assumed cash recovery for managing the Graphite lease obligations, minus (iv) a special cash dividend to Graphite pre-merger stockholders of $69 million. The counterproposal also provided for a concurrent financing at closing of no less than $75 million.

Also on May 15, 2023, Kamau's legal counsel informed Goodwin that the proposal presented on May 11th was generally acceptable to Kamau provided that the required financing amount was reduced from $20 million to $10 million and the time period to raise such amounts was extended from 60 days to 12 months, and in return, Graphite would receive a 20% equity interest in Kamau.

Following receipt of the proposal from Kamau's legal counsel, Goodwin presented the revised terms to the Transaction Committee. Following discussion, the Transaction Committee concluded that the revised proposal and terms were acceptable and instructed Goodwin to finalize the documentation with Kamau's legal counsel.

On May 19, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Graphite's management discussed Graphite's cash burn and cash position. Graphite's management provided the Transaction Committee with an analysis prepared by Graphite's management regarding a potential liquidation of Graphite, including the potential timeline for liquidation and an estimate of the amount that would be distributable to Graphite stockholders in such potential liquidation scenario. Graphite's management discussed the estimated impact of a potential liquidation, including that a meaningful amount of Graphite's current cash balance would need to be held back to cover current liabilities and future potential liabilities triggered by a liquidation strategy. The meeting participants also discussed the possible advantages and disadvantages to Graphite stockholders of a potential cash tender offer at a discount to its net cash value in light of Graphite's efforts to identify counterparties for a potential strategic transaction that could deliver value to Graphite stockholders in excess of its cash. Following discussion, the Transaction Committee concluded that neither a liquidation nor a potential cash tender offer at a discount to Graphite's net cash value was reasonably likely to create greater value for Graphite stockholders than a reverse merger or other strategic transaction that could deliver value to Graphite stockholders in excess of its cash.

On May 23, 2023, Party A sent Graphite a counterproposal to Graphite's May 15, 2023 counterproposal which detailed a proposed reverse merger transaction with an ascribed value to Party A of $136 million, with an implied ownership interest in the combined company of approximately 55% for Party A equityholders and an ascribed valuation of Graphite of $113 million, with an implied ownership interest in the combined company of approximately 45% for existing Graphite equityholders. The Graphite valuation was based on (i) $113 million of net cash at closing, plus (ii) a non-cash enterprise value of $15 million, plus (iii) $35 million credit for the assumed cash recovery for managing the Graphite lease obligations, minus (iv) a special cash dividend to Graphite pre-merger stockholders of $50 million. The counterproposal also provided for a concurrent financing at closing of no less than $50 million.

On May 24, 2023, as directed by the Transaction Committee, Goodwin informed Dr. Porteus and Kamau's legal counsel that the proposal made on May 15th was acceptable to the Transaction Committee and that Goodwin would prepare a draft license agreement.

On May 25, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Graphite's management,

representatives of Leerink Partners and transaction counsel provided an update on the discussions with Party A and the anticipated timeline for a potential transaction with Party A. The Transaction Committee provided feedback and direction to Graphite's management and Graphite's advisors on these matters.

On May 31, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Following discussion, the Transaction Committee determined that Party A was the lead candidate for a potential reverse merger transaction based upon the evaluation guidelines outlined in the Criteria, and instructed Leerink Partners to deliver a draft term sheet to Party A. As discussed above, because Goodwin was outside legal counsel to Party A, transaction counsel directed the negotiations regarding the term sheet and transaction documents with Party A, and Goodwin did not participate.

On June 2, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners sent a non-binding term sheet to Party A. The term sheet proposed a simultaneous sign and close reverse merger transaction that would allow for an accelerated closing. The term sheet provided an ascribed value of Party A of $130 million, with an implied ownership interest in the combined company of approximately 52% for Party A equityholders and an ascribed value of Graphite of $118 million (assuming closing net cash of $113 million) with an implied ownership interest in the combined company of approximately 48% for existing Graphite equityholders, in each case, prior to any concurrent financing. The Graphite valuation was based on (i) $113 million of net cash at closing, plus (ii) a non-cash enterprise value of $15 million, plus (iii) $50 million credit for the assumed cash recovery for managing the Graphite lease obligations, minus (iv) a special cash dividend to Graphite pre-merger stockholders of $60 million. The term sheet also provided for a concurrent financing at closing of no less than $60 million, with at least $50 million of the commitments from new investors. The term sheet provided for contingent value rights ("CVRs") or similar mechanism representing the contingent right of Graphite's stockholders to receive cash payments upon the receipt of proceeds from the disposition of Graphite's assets or revenue received from the license of such assets.

From June 2 through June 9, 2023, representatives of Graphite and representatives of Party A discussed and negotiated the term sheet.

Also on June 2, 2023, Graphite's management received a draft of a non-binding term sheet from Samsara BioCapital for the purchase of certain NGTC assets from Graphite. The draft term sheet provided for an upfront payment to Graphite of $500,000 and an additional payment of $500,000 payable upon confirmation of hematopoietic stem cell depletion in non-human primates and a commitment to hire approximately five to ten Graphite employees central to the NGTC program. Between June 2 and June 27, 2023, Goodwin and Samsara BioCapital's outside legal counsel exchanged drafts of, and negotiated, the term sheet.

On June 5, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Graphite's management, representatives of Leerink Partners and transaction counsel provided an update on the term sheet negotiations with Party A and the anticipated timeline for a potential transaction with Party A. The Transaction Committee provided feedback and direction to Graphite's management and Graphite's advisors on these matters.

On June 6, 2023, Versant Ventures informed Graphite's management that Versant Ventures was interested in partnering with Samsara BioCapital in the purchase of the NGTC assets. Samsara BioCapital and Versant Ventures proposed that the purchase of the NGTC assets would be completed through a newly formed entity by Samsara BioCapital and funds affiliated with Versant Ventures, which became Maro Bio, Inc. ("Maro").

On June 16, 2023, following Samsara BioCapital's and Versant Venture's indication of interest in the NGTC assets, Graphite's management contacted three other potentially interested third parties to gauge interest in a possible acquisition of NGTC assets. None of these parties were interested in the NGTC assets on terms at least as favorable to Graphite as those proposed by Maro.

On June 9, 2023, Graphite and Party A executed the non-binding term sheet. The executed term sheet was substantially identical to the draft term sheet Graphite provided on June 2, 2023. The executed term sheet also provided for an exclusive negotiation period through July 9, 2023.

From June 10 through August 14, 2023, representatives of Graphite and representatives of Party A completed confirmatory due diligence on each other and negotiated the terms of a merger agreement. Also during this period, Party A engaged in discussions with potential investors for a concurrent financing that would close concurrently with the closing of Graphite's transaction with Party A, which was contemplated to be a simultaneous sign and close reverse merger transaction allowing for an accelerated closing.

Between June 21 and July 27, 2023, Goodwin and Kamau's counsel exchanged drafts of the license agreement to memorialize the terms agreed to between the parties on May 24, 2023.

On June 23, 2023, Graphite's management provided the Transaction Committee with update on the status of the sale of the NGTC assets, reviewed the terms of the current term sheet with Maro and the results of outreach efforts to potentially interested third parties. Following discussion, the Transaction Committee authorized Graphite's management to execute the term sheet with Maro on the terms discussed.

On June 27, 2023, as authorized by the Transaction Committee, Graphite and Maro executed a non-binding term sheet for the acquisition of certain NGTC assets. The term sheet provided for (1) Maro to pay Graphite: (A) an upfront payment comprised of (i) $500,000 plus (ii) the amount of Graphite's operating expenses incurred from the date of the term sheet through closing, (B) a $1 million milestone payment payable upon initiation of specified studies, (C) a 0.75% royalty on worldwide net sales by Maro and its affiliates, and (D) a transaction fee totaling 15% of the consideration included in any offer received by Maro within 12 months following the execution of the term sheet for the NGTC assets acquired and (2) a commitment by Maro to hire five to ten Graphite employees central to the NGTC program.

On June 29, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Graphite's management and representatives of Leerink Partners provided an update on the negotiations with Party A, the anticipated timing of Party A's concurrent financing and the anticipated timeline for the potential transaction with Party A. The Graphite board of directors provided feedback and direction to Graphite's management and Graphite's advisors on these matters.

Graphite's management also provided an update on the status of the process to license or partner the nula-cel and NGTC assets, noting that despite considerable effort and engagement by Graphite's management, no third parties had indicated interest in pursuing a partnership or license on terms favorable to Graphite due to, among other things, the early-stage nature of the assets. Graphite's management reported on the proposed out-license of certain nula-cel assets to an entity affiliated with Kamau. Graphite's management also reported on the entry into the term sheet for the sale of certain NGTC assets to Maro which was executed after Graphite had confirmed with other potentially interested parties that there was no other interest in the NGTC assets on terms at least as favorable to Graphite. The Graphite board of directors agreed that any director affiliated with such a potential counterparty would be recused from discussions and decisions relating to a potential transaction with such counterparty. The Graphite board of directors instructed Graphite's management and Goodwin to proceed in negotiating an asset purchase agreement with Maro on the terms contemplated in the term sheet.

Graphite's management also presented a proposed reduction in force and plan of termination, including the proposed scope and timeline for the headcount reduction, in connection with the anticipated reverse merger with Party A, and potential nula-cel and NGTC transactions. Following discussion, the Graphite board of directors authorized Graphite's management to proceed with implementing various actions to preserve cash available by a reduction in force, on such timeline as Graphite's management deemed to be in Graphite's best interest.

On June 30, 2023, Graphite's then-chief financial officer departed to pursue other opportunities. This departure was not the result of any disagreement with Graphite on any matter relating to Graphite's operations, policies or procedures.

On July 7 and 21, 2023, the Transaction Committee held a meeting with members of Graphite's management and representatives of Leerink Partners and transaction counsel present. At the meetings, Graphite's management and representatives of Leerink Partners provided an update on the negotiations with Party A, the anticipated timing of Party A's concurrent financing and the anticipated timeline for a potential transaction with Party A.

On July 10, 2023, as authorized by the Transaction Committee, Graphite extended the mutual exclusivity period with Party A pursuant to which the parties agreed to negotiate exclusively until July 31, 2023.

Between July 12 and July 28, 2023, Maro's legal counsel and Goodwin negotiated and exchanged drafts of the asset purchase agreement to memorialize the terms agreed to in the executed term sheet discussed at the Graphite board of directors meeting held on June 29, 2023.

On July 27, 2023, the Graphite board of directors, based on a recommendation made by the Transaction Committee, approved a license and option agreement (the "LOA") with Kamau pursuant to which Graphite exclusively licensed to Kamau, and granted Kamau, an option to acquire certain intellectual property and materials related to the Company's nula-cel program and related pre-clinical platform assets. In return for this license and option, Graphite received an equity interest in Kamau representing 20% of all outstanding shares on a fully diluted basis. It was noted that Dr. Porteus, a director and stockholder of Graphite, is the founder and chief executive officer of Kamau.

On July 28, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. At this meeting, the Graphite board of directors appointed Kimberlee C. Drapkin as a director. Also at this meeting (without Dr. Davis, Dr. Rizzuto or Mr. Bassan present), Graphite's management briefed the Graphite board of directors on a proposal for Graphite to enter into an asset purchase agreement for the sale of the NGTC assets to Maro pursuant to the letter of intent discussed at the Graphite board of directors meeting held on June 29, 2023. The Graphite board of directors considered outreach efforts made by Graphite to various other prospective purchasers of the assets, 13 of which indicated potential interest following contact by Graphite, and noted that despite advanced diligence conducted on the assets by five of these other prospective purchasers, Maro was the sole bidder for the assets to present a definite proposal to Graphite. Following discussion, the Graphite directors present, which did not, for clarity, include Dr. Davis, Dr. Rizzuto or Mr. Bassan, approved the NGTC transaction on the terms presented.

On July 31, 2023, as authorized by the Transaction Committee, Graphite extended the mutual exclusivity period with Party A pursuant to which the parties agreed to negotiate exclusively until August 18, 2023.

On August 1, 2023, as authorized by the Graphite board of directors, Graphite entered into an asset purchase agreement (the "APA") with Maro, pursuant to which Graphite sold to Maro, concurrently with the execution of the APA, certain assets related to Graphite's NGTC program in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate as well as royalties on net sales by Maro, of certain products incorporating the acquired technology, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development expenses incurred prior to closing of approximately $0.6 million as well as certain transition services to be provided by Graphite to Maro.

On August 4, 2023, Graphite entered into the LOA.

On August 4 and 9, 2023, Party A's financial advisor informed representatives of Leerink Partners that several leading healthcare investors that Party A had expected to participate in the concurrent financing had declined interest.

On August 4 and 9, 2023, the Transaction Committee held meetings at which members of Graphite's management and representatives of Leerink Partners and transaction counsel were present. Graphite's management and representatives of Leerink Partners provided an update on the negotiations with Party A and the anticipated timeline for a potential transaction with Party A. Representatives of Leerink Partners also provided an update on their discussions with Party A's financial advisor and the likelihood of Party A securing the agreed upon concurrent financing commitments. Based on this discussion, the Transaction Committee believed it was unlikely that Party A would be able to secure the commitment for the proposed $60 million concurrent financing.

On August 11, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. The meeting participants discussed the status of the proposed reverse merger with Party A and its concurrent financing, noting that Party A appeared to be unable to secure the proposed concurrent financing commitments from potential investors. The meeting participants discussed strategic options available to Graphite in the event Party A was unable to complete a concurrent financing in an amount or otherwise on terms that would enable Graphite to proceed with the proposed transaction with Party A and generate sufficient value to Graphite stockholders. The meeting participants noted the upcoming expiration of exclusivity with Party A on August 18, 2023. Following discussion, the Transaction Committee directed Graphite's management and Leerink Partners to inform Party A that Graphite would seek early termination of the exclusivity period in the event that Party A could not secure sufficient investor commitments for the proposed concurrent financing in the coming days. In anticipation of the termination of exclusivity with Party A, the meeting participants discussed potential strategic alternatives to the transaction with Party A, including other potential reverse merger candidates, a strategic transaction with another public company for the redeployment of Graphite's net cash and a potential liquidation of Graphite.

On August 11, 2023, Party A's financial advisor informed representatives of Leerink Partners that Party A was unlikely to secure sufficient commitments from investors in the concurrent financing to enable Party A to consummate the reverse merger transaction with Graphite on the agreed upon terms. Representatives of Leerink Partners conveyed this information to the Transaction Committee for its discussion and consideration on next steps with Party A.

On August 15, 2023, as authorized by the Transaction Committee, Graphite and Party A mutually agreed upon the immediate termination of their exclusivity period.

Later on August 15, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. At this meeting, the representatives of Leerink Partners reviewed certain strategic alternatives for Graphite, including a potential sale of Graphite for cash and a reverse merger transaction. The representatives of Leerink Partners then reviewed with the Transaction Committee a list of 31 private and public companies that might be potentially interested in a strategic transaction with Graphite (including a potential reverse merger) including four private companies and one public company previously prioritized for management presentations in the prior phase of Graphite's strategic process. This list of 31 companies included LENZ and certain companies that registered inbound interest and were not included in the prior phase of Graphite's strategic process. Counterparties were primarily privately-held biotechnology companies that were identified, or identified themselves, based on their need to obtain financing and/or their interest in becoming a public company with access to the public capital markets. Following discussion, and based on the Criteria, the Transaction Committee directed representatives of Leerink Partners to contact ten of the companies discussed to determine their potential interest in a reverse merger, including LENZ, Party B, Party D and an additional private company that had not been sent a process letter in the prior phase of Graphite's strategic process ("Party E").

The meeting participants also discussed other potential strategic alternatives, including a liquidation of Graphite or a potential cash tender offer by a counterparty interested in acquiring Graphite's net cash. Following discussion, the Transaction Committee determined that one of the members of the Transaction Committee would

confidentially contact high-level representatives of two public biopharmaceutical companies with which the Transaction Committee member had preexisting relationships, to ascertain interest regarding a potential transaction with Graphite focused on the redeployment of Graphite's net cash balance for its ongoing operations.

On August 17, 2023, as authorized by the Transaction Committee, representatives of Leerink Partners contacted the chief executive officer of LENZ to ascertain interest in a potential transaction with Graphite. Representatives of LENZ confirmed potential interest in such a transaction on August 18, 2023.

From August 17 through August 23, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners contacted Party B and Party D regarding their interest in submitting a non-binding indication of interest and also sent the eight other parties identified by the Transaction Committee a process letter requesting that such companies submit non-binding written indications of interest by August 30, 2023. Leerink Partners sent LENZ a process letter on August 18, 2023. The process letter indicated that Graphite's projected available net cash balance at closing was approximately in the range of $210 – 220 million, excluding the potential impact of the settlement of the Bayside Lease liability.

At the direction of the Graphite board of directors and the Transaction Committee, members of the Transaction Committee, Graphite's management representatives of Leerink Partners, Goodwin and transaction counsel conducted due diligence on eight potential counterparties, focusing on strategic, scientific and clinical diligence, as well as competition and other business factors. These advisors included external consultants, engaged by Graphite at the request of the Transaction Committee, who assisted with Graphite's due diligence. Of the eight process letters sent by Leerink Partners to potential counterparties, seven of the counterparties submitted non-binding indications of interest, and six counterparties executed, or were subject to existing, customary mutual confidentiality agreements with Graphite (each of which included customary standstill provisions that automatically terminated upon Graphite's announcement of the transaction with LENZ).

On August 18, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners, Goodwin and transaction counsel were present. Graphite's management and representatives of Leerink Partners provided an update on the potential reverse merger with Party A, noting that exclusivity with Party A was mutually terminated due to Party A's inability to secure its proposed concurrent financing. Following discussion, the Graphite board of directors directed Graphite's management and its advisors to terminate diligence activities and discussions with Party A due to its inability to secure the proposed concurrent financing. Representatives of Leerink Partners provided an update on its outreach efforts to other potential reverse merger counterparties subsequent to the termination of exclusivity with Party A and consideration of other strategic alternatives. The representatives of Leerink Partners discussed anticipated timing for completing a potential strategic transaction with various prospective counterparties. The Graphite board of directors provided feedback to Graphite's management and its advisors on these matters.

Also at this meeting, the participants considered Graphite's cash management strategy and further efforts to improve Graphite's net cash value. The Graphite board of directors approved a restructuring plan (including reducing its workforce by approximately 70%) to better align its workforce with the needs of its business and to reduce Graphite's operational cash burn in an effort to maximize its strategic optionality. Graphite's management also provided an update on ongoing discussions to reduce Graphite's obligations under the Bayside Lease. Graphite's management also discussed a preliminary updated liquidation model with the Graphite board of directors, noting that the timing for any distributions to stockholders in a dissolution scenario could be over a year.

Also at this meeting, the Graphite board of directors appointed Ms. Drapkin as President and Chief Executive Officer. Ms. Drapkin was appointed to lead Graphite's ongoing exploration of strategic alternatives as part of its corporate restructuring (as more fully described in the section titled "*The Merger—Interests of the Graphite's Directors and Executive Officers in the Merger*" beginning on page 174 of this proxy statement/prospectus). In connection with Ms. Drapkin's appointment, Josh Lehrer, M.D., Graphite's former President,

Chief Executive Officer and member of the Board, separated from his employment and all officer and director positions with Graphite, effective as of August 21, 2023. Dr. Lehrer's departure was not the result of any disagreement with Graphite on any matter relating to Graphite's operations, policies or procedures.

Later on August 18, 2023, at the direction of the Graphite board of directors, Graphite's management and its advisors terminated diligence activities and discussions with Party A. No further discussions regarding a strategic transaction between Graphite and Party A occurred after this time.

Beginning on August 28, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners requested five private counterparties identified by the Transaction Committee and Party D each make presentations to the Transaction Committee and Graphite's management, and to otherwise be available for due diligence sessions with Leerink Partners, the Transaction Committee, Graphite's management and its legal advisors. At the direction of the Transaction Committee, Leerink Partners informed the other potential counterparties that had submitted indications of interest that they were not advancing to the next stage of discussions based on determinations by the Transaction Committee.

On August 30, 2023, Graphite received additional inbound interest from a private company interested in exploring a reverse merger with Graphite. At the direction of the Transaction Committee, Leerink Partners sent the counterparty a process letter on September 3, 2023. After receiving the process letter, the counterparty did not submit a non-binding indication of interest.

From August 31 through September 8, 2023, six of the potential counterparties that were sent process letters met with and presented their corporate presentation to the Transaction Committee, Graphite's management and representatives of Leerink Partners (including Party E and LENZ, on September 5 and September 8, 2023, respectively). Following these presentations, the Transaction Committee further evaluated its assessment of the potential counterparties that presented to the Transaction Committee and provided feedback to Graphite's management and representatives of Leerink Partners.

From September 1 through 15, 2023, the Transaction Committee met three times with members of Graphite's management and representatives of Leerink Partners and Goodwin present. Representatives of Leerink Partners reviewed the status of outreach to potential counterparties and indications of interest received thus far. The Transaction Committee discussed the status of their review of the indications of interest compared to the Criteria and additional information learned about the counterparties. After reviewing all of the submitted indications of interest, the Transaction Committee selected five indications of interest from private companies and Party D's indication of interest to prioritize and invite to make management and due diligence presentations, including:

- The indication of interest from Party E, a privately held biotechnology company developing biologic drugs, which was received on August 28, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $125 million (assuming closing net cash of $220 million and remaining operating lease obligations of $105 million) and an ascribed valuation of Party E of $200 million, with an implied ownership interest in the combined company of approximately 38% for existing Graphite stockholders, prior to any concurrent financing. Party E's proposal also contemplated a concurrent financing of $100 – 125 million.
- The indication of interest from LENZ, which was received on August 30, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $170 - 180 million (assuming closing net cash of $210 - 220 million and remaining operating lease obligations of $50 million) with an ascribed valuation of LENZ to be provided. Representatives of LENZ verbally communicated that LENZ's proposed valuation would be based on an approximately 1.3x to 1.4x step up to LENZ's last post-money valuation of approximately $235 million. LENZ's proposal also contemplated a potential concurrent financing of an unspecified amount.

- The indication of interest from Party D, which was received on August 28, 2023, and which proposed a public merger transaction with an ascribed valuation of Graphite of $105 million and an ascribed valuation of Party D of approximately $461 million, with an implied ownership interest in the combined company of approximately 19% for existing Graphite stockholders, prior to any concurrent financing. The Graphite valuation assumed Graphite's net cash at close of $150-200 million after transaction expenses and after settling all other obligations, including the lease, and that Graphite would distribute 25-50% of its net cash at close as a special cash dividend to Graphite pre-merger stockholders such that Graphite's net cash after the dividend was $100 million. Party D's proposal also contemplated a concurrent financing of at least $25 million.
- The indication of interest from "Party N", a privately held biotechnology company developing medicines for cancer, received on August 31, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $175-185 million (assuming closing net cash of $220 million and remaining operating lease obligations of $50-60 million) and an ascribed valuation of Party N of $243 million, with an implied ownership interest in the combined company of approximately 42-43% for existing Graphite stockholders, prior to any concurrent financing. Party N's proposal also contemplated a concurrent financing of $75 million.
- The indication of interest from "Party O", a privately held biotechnology company developing medicines for autoimmune and allergic diseases, received on August 29, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $165-220 million (assuming closing net cash of $150-200 million after transaction expenses and after settling all other obligations, including the lease) and an ascribed valuation of Party O of $750 million, with an implied ownership interest in the combined company of approximately 18-23% for existing Graphite stockholders. Party O's proposal did not contemplate a concurrent financing.
- The indication of interest from "Party P", a privately held biotechnology company developing medicines for cancer, received on August 31, 2023, and which proposed a reverse merger transaction with an ascribed valuation of Graphite of $185 million (assuming closing net cash of $190 million and remaining operating lease obligations of $20 million) and an ascribed valuation of Party P of $590 million, with an implied ownership interest in the combined company of approximately 24% for existing Graphite stockholders, prior to any concurrent financing. Party P's proposal also contemplated a concurrent financing of at least $30 million.

During the meetings, the participants noted that Dr. Davis is a managing director at Versant Ventures and Dr. Rizzuto is a managing director at Versant Ventures, and funds affiliated with Versant Ventures are investors in Graphite and LENZ, and Clare Ozawa, a representative of Versant Ventures, serves on the board of directors of LENZ. Representatives of Goodwin reviewed the fiduciary duties of the members of the Transaction Committee and the process by which any conflicted board members or advisors would be recused from certain discussions and decisions to approve a strategic transaction counterparty in the event that a conflict was determined to exist.

On September 1, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. The meeting participants discussed the status of diligence on the prioritized counterparties. Also at the meeting, Graphite's management provided an update on the status and timeline for settling Graphite's obligations under the Bayside Lease, noting that Graphite had reached an agreement in principle with the landlord to settle Graphite's Bayside Lease liability of approximately $112 million for approximately $37 million, and as a result, Graphite's projected net cash at closing would be in the range of $170 – 180 million with no continuing lease obligations. The Transaction Committee directed Graphite's management to update Graphite's management's liquidation analysis for the expected settlement of the Bayside Lease obligation to determine an estimate of projected net cash that would be available for distribution to Graphite stockholders if such a distribution was made.

On September 6, 2023, Graphite entered into a mutual confidentiality agreement with LENZ, which included customary standstill obligations that would automatically terminate upon Graphite's announcement of the execution of a definitive agreement with a third party to effect a change of control of Graphite.

On September 8, 2023, representatives of LENZ made a corporate presentation to the Transaction Committee and members of Graphite's management. Representatives of Leerink Partners were present.

On September 8 and 15, 2023, the Transaction Committee held meetings at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. The meeting participants discussed the status of diligence on the prioritized counterparties. The Transaction Committee was provided an update that the public companies contacted to ascertain interest in a potential acquisition of Graphite for redeployment of its net cash had expressed that a potential cash tender offer would be at a discount to Graphite's net cash. The meeting participants discussed the possible advantages and disadvantages to Graphite stockholders of a potential cash tender offer at a discount to its net cash value in light of Graphite's efforts to identify counterparties for a potential strategic transaction that could deliver value to Graphite stockholders in excess of its cash. Following discussion, the Transaction Committee (without Dr. Davis participating with respect to LENZ) indicated its support for Graphite's management and representatives of Leerink Partners prioritizing engaging in additional due diligence and discussions with each of Party E and LENZ.

On September 12, 2023, LENZ was provided access to an online data room containing nonpublic information regarding Graphite.

Also, on September 12, 2023, Graphite was provided access to an online data room containing nonpublic information regarding LENZ.

On September 17, 2023, representatives of Leerink Partners and LENZ confirmed via email correspondence that LENZ's proposed valuation would be based on an approximately 1.2x to 1.6x step up to LENZ's last post-money valuation of approximately $232 million and that the concurrent PIPE financing would be expected to be $50 to $75 million.

On September 18, 2023, representatives of LENZ made a corporate presentation to Samsara BioCapital. Certain Transaction Committee members (other than Dr. Davis) and members of Graphite's management were present.

On September 19, 2023, representatives of Party E made a corporate presentation to Samsara BioCapital. Certain Transaction Committee members and members of Graphite's management were present.

On September 20, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. The meeting participants discussed the status of diligence on the prioritized counterparties. Following discussion, and based on its judgment that Party E and LENZ represented the most promising candidates for a strategic transaction based upon the evaluation guidelines outlined in the Criteria, as well as indicative relative valuations, the Transaction Committee (without Dr. Davis participating with respect to LENZ) directed Leerink Partners to engage in further negotiations with Party E and LENZ regarding the terms in their initial proposals described above, including regarding relative valuation and ownership, the terms and amount of any concurrent financing, the terms and amount of any cash dividend to Graphite's pre-merger stockholders, the concept of Graphite being permitted to distribute a CVR to the pre-merger stockholders entitling them to additional value in the event of receipt of proceeds from the disposition of Graphite's assets or revenue received from the license of such assets, and the number of board seats each party would be entitled to in the combined company. Also at the meeting, the Transaction Committee members affiliated with investment funds that are significant stockholders of Graphite discussed the perspective of the affiliated investment funds as stockholders regarding Party E and LENZ, including whether the affiliated investment funds would sign support agreements obligating them to vote their shares in favor of the transaction

(subject to customary exceptions). At the conclusion of the meeting, the Transaction Committee directed Graphite's management and its advisors to prepare a term sheet to send to Party E reflecting the terms discussed at the meeting, and to continue to engage in discussions and diligence with LENZ.

On September 21, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners sent a non-binding term sheet to Party E. The term sheet provided an ascribed value of Party E of $150 million, with an implied ownership interest in the combined company of approximately 55% for Party E equityholders and an ascribed value of Graphite of $125 million (assuming closing net cash of $175 million) with an implied ownership interest in the combined company of approximately 45% for existing Graphite equityholders, in each case, prior to any concurrent financing. The Graphite valuation was based on (i) $175 million of net cash at closing, plus (ii) a non-cash enterprise value of $10 million, minus (iii) a special cash dividend to Graphite pre-merger stockholders of $60 million. The term sheet also provided for a concurrent financing at closing of no less than $125 million. The term sheet also provided for CVRs or a similar mechanism representing the contingent right of Graphite's stockholders to receive cash payments upon the receipt of proceeds from the disposition of Graphite's assets or revenue received from the license of such assets.

On September 22, 2023, Party E informed Graphite's management of a potential adverse finding in Party E's study for its lead program.

On September 22, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Members of the Transaction Committee and representatives of Leerink Partners provided an update on the strategic alternatives review process. Representatives of Leerink Partners reviewed the status of discussions and diligence with each of Party E and LENZ. The meeting participants discussed that after evaluation of the additional information provided by Party E, the Graphite board of directors believed there could be potential additional regulatory risk or delay related to Party E's lead program, which the Graphite board of directors directed Graphite's management to confirm upon further diligence with assistance of certain Graphite directors. Based on this assessment, and assuming the confirmation of potential additional regulatory risk or delay related to Party E's lead program, the Graphite board of directors concluded that based on the Criteria and the due diligence findings discussed at the meeting, LENZ's proposal represented the best alternative to further enhance stockholder value. Following discussion, the Graphite board of directors (without Dr. Davis or Dr. Rizzuto participating with respect to LENZ) directed Graphite's management and its advisors to prioritize due diligence and discussions with LENZ and deprioritize discussions with Party E. The Graphite board of directors (without Dr. Davis or Dr. Rizzuto participating) directed Graphite's management and its advisors to prepare a term sheet to send to LENZ reflecting the terms discussed at the meeting. The Graphite board of directors reviewed a customary relationship disclosure letter made available by Leerink Partners prior to the meeting, indicating that Leerink Partners had not been engaged by Party E or LENZ during the two-year period prior to such disclosure. Following review of this information, the Graphite board of directors determined that there was no conflict of interest that would impact Leerink Partners' ability to act independently and effectively as financial advisor to Graphite.

From September 22 through 27, 2023, Graphite's management and certain Graphite directors engaged in discussions with Party E to confirm their understanding of the lead program. These discussions confirmed the Graphite board of directors' belief that there could be potential additional regulatory risk or delay related to Party E's lead program.

On September 22, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners sent a non-binding term sheet to LENZ. The term sheet provided for a traditional reverse merger transaction with an ascribed value of LENZ of $272 million (provided that such valuation would be adjusted to match the valuation for LENZ implied by the concurrent PIPE financing), with an implied ownership interest in the combined company of approximately 69% for LENZ equityholders and an ascribed value of Graphite of $125 million (assuming closing net cash of $175 million) with an implied ownership interest in the combined company of approximately 31% for existing Graphite equityholders, in each case, prior to any concurrent financing. The Graphite valuation was based on (i) $175 million of net cash at closing, plus (ii) a non-cash

enterprise value of $10 million, minus (iii) a special cash dividend to Graphite pre-merger stockholders of $60 million. The term sheet also provided for a concurrent PIPE financing at closing of no less than $75 million, and that the LENZ valuation was subject to adjustment based on the pricing of the PIPE financing. The term sheet provided for CVRs or a similar mechanism representing the contingent right of Graphite's stockholders to receive cash payments upon the receipt of proceeds from the disposition of Graphite's assets or revenue received from the license of such assets.

On September 24, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners sent a revised non-binding term sheet to LENZ clarifying that the adjustment to the LENZ valuation based on the pricing of the PIPE financing was only subject to a downward adjustment.

On September 27, 2023, at the direction of the Graphite board of directors, Graphite's management and its advisors terminated diligence activities and discussions with Party E based on the potential regulatory risks related to Party E's lead program that were discussed by the Graphite board of directors in the September 22, 2023 meeting. No further discussions regarding a strategic transaction between Graphite and Party E occurred after this time.

Also on September 27, 2023, representatives of LENZ sent representatives of Graphite a revised term sheet. The revised terms included an ascribed value of LENZ of $300 million, with an implied ownership interest in the combined company of approximately 71% for LENZ equityholders and an ascribed value of Graphite of $125 million (assuming closing net cash of $175 million) with an implied ownership interest in the combined company of approximately 29% for existing Graphite equityholders, in each case, prior to any concurrent PIPE financing. The revised terms also provided LENZ the option to increase the amount of the concurrent PIPE financing, and in such case, the cash dividend to Graphite pre-merger stockholders being increased up to an amount not to exceed such excess, and that Graphite's closing net cash would not be less than $115 million. The revised terms also noted that the parties would explore structures or proposals which would obviate any requirement to institute a CVR or similar mechanism as proposed by Graphite's proposed term sheet, although the CVR concept remained in the term sheet. In addition, the revised terms also provided that the support agreements would not terminate upon a change in recommendation of the Graphite board of directors to recommend a superior proposal, and that neither Graphite nor LENZ could terminate the merger agreement to accept a superior proposal.

Also on September 27, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. The meeting participants discussed the status of discussions with LENZ regarding the term sheet. The Graphite board of directors provided feedback to Graphite's management and its advisors regarding the key items being negotiated in the term sheet with LENZ, including regarding the LENZ valuation, the terms and amount of the concurrent PIPE financing and the terms and amount of a cash dividend to Graphite's pre-merger stockholders. The Graphite board of directors also received updates from the investor affiliated directors regarding the perspective of the affiliated investment funds as stockholders regarding LENZ, including their willingness to execute support agreements requiring such funds to vote their shares in favor of a transaction with LENZ (subject to customary exceptions). At the conclusion of the discussion, the Graphite board of directors (excluding Dr. Davis and Dr. Rizzuto) directed Graphite's management to finalize the term sheet with LENZ within the parameters discussed at the meeting, and subject to oversight by the Transaction Committee (without Dr. Davis participating), including agreeing to an exclusivity period for a length to be determined by the Transaction Committee.

On September 28, 2023, at the direction of the Transaction Committee, representatives of Leerink Partners sent representatives of LENZ a revised term sheet. The revised terms included an ascribed value of LENZ of $272 million, with an implied ownership interest in the combined company of approximately 69% for LENZ equityholders and an ascribed value of Graphite of $125 million (assuming closing net cash of $175 million) with an implied ownership interest in the combined company of approximately 31% for existing Graphite equityholders, in each case, prior to any concurrent financing. The revised terms also provided for an increase in the amount of the concurrent PIPE financing at LENZ's option, and in such case, the cash dividend being

increased up to an amount not to exceed the lesser of such excess or $75 million and Graphite being able to meet the minimum net cash requirement of $115 million by reducing the size of the cash dividend. The revised terms also noted that Graphite was open to considering a buyout proposal for the CVR, although the CVR concept remained in the term sheet.

On September 29, 2023, representatives of LENZ's outside legal counsel, Wilson Sonsini Goodrich & Rosati (referred to as "WSGR") sent Goodwin a revised draft of the term sheet. The revised terms included an ascribed value of LENZ of $285 million, with an implied ownership interest in the combined company of approximately 70% for LENZ equityholders and as ascribed value of Graphite of $125 million (assuming closing net cash of $175 million and a $60 million cash dividend to Graphite's pre-merger stockholders) with an implied ownership interest in the combined company of approximately 30% for existing Graphite equityholders, in each case, prior to any concurrent financing. The revised terms also provided for a customary "cutback" of the Graphite shares that would be subject to the support agreements should the Graphite board of directors make a Graphite board recommendation change and that the shares subject to the lock-up agreement would not include the shares of Graphite common stock purchased in the concurrent PIPE financing or in the open market post-closing. In addition, the revised terms provided that the parties would continue discussion of third parties buying out the assets subject to the CVR prior to closing, with any net benefit of such buyout being included in net cash for the benefit of Graphite stockholders. Later that day, Goodwin provided WSGR and representatives of LENZ a revised draft of the term sheet. The revised terms provided that the shares subject to the support agreements would be automatically reduced on a pro rata basis upon a Graphite board recommendation change so that the aggregate number of shares subject to the support agreement would be equal to the greater of (i) 20% of the outstanding shares of Graphite common stock or (ii) 30% of the votes cast in support of the Graphite Stockholder Proposals.

Later on September 29, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. The meeting participants discussed the status of the term sheet discussions with LENZ. The investor affiliated directors confirmed the willingness of the affiliated investment funds to execute support agreements requiring such funds to vote their shares in favor of a transaction with LENZ on the proposed terms (subject to customary exceptions). Following discussion, the Transaction Committee (excluding Dr. Davis, who recused himself) approved the September 29 term sheet with LENZ, which included a 30-day mutual exclusivity period.

From September 29 through October 3, 2023, representatives of Graphite and LENZ finalized the term sheet on the terms approved by the Transaction Committee at its September 29, 2023 meeting.

On October 3, 2023, Graphite and LENZ entered into the non-binding term sheet, which also provided for a mutual exclusivity period until November 2, 2023.

On October 7, 2023, Goodwin sent a first draft of the merger agreement to WSGR.

On October 18, 2023, WSGR sent a revised draft of the merger agreement to Goodwin.

From October 18 through November 14, 2023, representatives of Goodwin, with input from the Graphite board of directors (including through the Transaction Committee) (without Dr. Davis or Dr. Rizzuto participating) and Graphite's management, and LENZ's representatives and WSGR exchanged drafts and participated in discussions regarding the terms of the merger agreement and related documents. The items negotiated with respect to the merger agreement and related documents included, among other things: the representations and warranties to be made by the parties; the restrictions on the conduct of the parties' businesses until completion of the transaction; the definitions of material adverse effect; the conditions to completion of the merger; the determination of Graphite's net cash balance at closing; the allocation of transaction expenses; the terms of the subscription agreement for the Graphite private placement and the aggregate amount of the Graphite private placement proceeds to be committed concurrently with the execution of the merger agreement and additional PIPE financing proceeds to be committed thereafter, as discussed below; adjustments to the amount of

the special cash dividend to Graphite pre-merger stockholders; the manner by which Graphite's stockholders would receive value in respect of potential near-term (within 12-18 months) revenue received under the LOA and the APA and a cost sharing arrangement between Graphite and LENZ regarding the expense of Graphite's 2023 fiscal year audit, which the parties ultimately agreed would be provided through an increase of $1.5 million in the enterprise valuation of Graphite, as described below, and obviated a need for a post-closing CVR agreement; the provisions regarding Graphite's employee benefit plans, severance and other compensation matters; the composition of the board of directors of the post-closing company; the remedies available to each party under the merger agreement, including the triggers of the termination fee payable to each of the parties; the amounts of the termination fees; and which equityholders of each of the parties would be required to execute support agreements and lock-up agreements concurrent with the execution of the merger agreement and the terms thereof. In addition, during this period, the Transaction Committee held six meetings, also attended by members of Graphite's management and representatives of Goodwin and Leerink Partners, to discuss the status of the merger agreement and related documents and to provide guidance on the terms of the definitive agreements that would be acceptable to Graphite. Also during this period, LENZ engaged in discussions with potential investors for the Graphite private placement that would close concurrently with the closing of Graphite's transaction with LENZ.

Additionally, from October 18 through November 2, 2023, Graphite's management, with input from the Transaction Committee (without Dr. Davis participating), and LENZ's representatives negotiated an increase in the enterprise valuation of Graphite in lieu of the post-closing CVR agreement. On November 1, 2023, representatives of LENZ proposed an increase of $1.35 million in Graphite's enterprise valuation in lieu of a post-closing CVR Agreement. For purposes of these negotiations, and its review of LENZ's proposal, Graphite applied its judgment as to the likelihood and amount of the near-term milestone payments under the APA that would become payable by Maro, which amounts at the time were contemplated to be paid to existing Graphite stockholders under the post-closing CVR agreement. Graphite also considered certain projected audit expenses and ancillary transaction costs expected to be incurred by Graphite in connection with the LENZ transaction that would be deducted from Graphite's net cash position at closing. Based on these factors, and to deliver additional immediate and certain value to the existing Graphite stockholders at closing, on November 2, 2023, Graphite countered LENZ's proposal with an offer of a $1.5 million increase in Graphite's enterprise valuation in lieu of utilizing a post-closing CVR Agreement, which LENZ accepted.

On October 19, 2023, LENZ shared with Graphite certain prospective financial information prepared by LENZ management.

On October 26, 2023, Graphite entered into a sublease and termination agreement with respect to the Bayside Lease which eliminated Graphite's Bayside Lease liabilities and allowed Graphite to confirm its projected amount of approximately $175 million net cash at the closing of the merger.

On October 27, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Graphite's management provided an update on its due diligence on LENZ, the status of the Graphite private placement and expected timeline for entering into the merger agreement with LENZ. Representatives of Goodwin provided an update on the negotiation of the merger agreement and related documents and discussed key items in the draft transaction documents. Graphite's management provided an update on the status of the completion of the settlement of the Bayside Lease obligation. The Transaction Committee provided feedback and direction to Graphite's management and its advisors on these matters.

On November 2, 2023, the Transaction Committee held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Graphite's management provided an update on its due diligence on LENZ, the status of the Graphite private placement and expected timeline for entering into the merger agreement with LENZ. Representatives of Goodwin provided an update on the negotiation of the merger agreement and related documents. The Transaction Committee provided feedback and direction to Graphite's management and its advisors on these matters. In view of the advanced status of

negotiations with LENZ and the determination by the Transaction Committee that the parties were close to finalizing the merger agreement and the Graphite private placement, the Transaction Committee approved extending exclusivity through November 16, 2023.

Graphite's management also discussed with the Transaction Committee certain prospective financial information prepared by LENZ management, as adjusted by Graphite's management. Graphite's management also discussed with the Transaction Committee an updated analysis prepared by Graphite's management regarding a potential liquidation of Graphite, including the potential timeline for liquidation and an estimate of the amount that would be distributable to Graphite stockholders in such liquidation scenario. Graphite's management did not update the potential liquidation scenario or prepare any other liquidation analysis after November 2, 2023, as described in the section titled "*The Merger—Certain Unaudited Prospective Financial Information—Graphite Liquidation Analysis*" beginning on page 169 of this proxy statement/prospectus.

Later on November 2, 2023, as authorized by the Transaction Committee, Graphite extended the mutual exclusivity period with LENZ pursuant to which the parties agreed to negotiate exclusively until November 16, 2023.

On November 6 and 9, 2023, the Transaction Committee held meetings at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Graphite's management and representatives of Goodwin and Leerink Partners provided an update on the negotiations with LENZ, the anticipated timing and status of the Graphite private placement and the anticipated timeline for execution of the merger agreement with LENZ. The Transaction Committee provided feedback to Graphite's management and its advisors on these matters.

On November 9 and 10, 2023, representatives of LENZ provided Graphite's management with an update on the status of the Graphite private placement. In particular, LENZ informed Graphite that LENZ anticipated receiving subscriptions concurrent with the execution of the merger agreement to invest $50 million, primarily from existing LENZ investors, instead of $75 million, and that the prospective investors were requiring that LENZ's pre-money valuation for purposes of the Graphite private placement (and thus also for purposes of the exchange ratio under the merger agreement) be based on the post-money valuation of LENZ's last financing round in March 2023 of approximately $232 million, instead of the $285 million valuation agreed upon by LENZ and Graphite in the executed term sheet. LENZ also informed Graphite that, based on then-ongoing discussions with prospective new investors, it anticipated potentially receiving additional commitments from new investors to the Graphite private placement following the execution of the merger agreement.

On November 10 and 12, 2023, the Transaction Committee held meetings at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Graphite's management and representatives of Goodwin and Leerink Partners provided an update on the negotiations with LENZ, the anticipated timing and status of the Graphite private placement and the anticipated timeline for execution of the merger agreement with LENZ. The Transaction Committee provided feedback to Graphite's management and its advisors on these matters. The Transaction Committee discussed the reduction in the amount of concurrent PIPE proceeds LENZ anticipated receiving concurrent with the execution of the merger agreement and the reduced valuation to be ascribed to LENZ in the Graphite private placement (and thus also for purposes of the exchange ratio under the merger agreement), while also noting that the merger agreement permitted LENZ to secure additional investments in the Graphite private placement following execution of the merger agreement.

The meeting participants also discussed other potential strategic alternatives in the event the LENZ transaction is not completed or Graphite determined not to proceed with the LENZ transaction due to the reduced amount of proceeds committed to the Graphite private placement at the time of execution of the merger agreement. In this regard, the meeting participants discussed the potential alternative of returning capital to Graphite stockholders and Graphite's management's liquidation analysis to determine an estimate of projected net cash available for distribution as a comparator to the proposal from LENZ or any similar transaction. The Transaction Committee considered that in the event the LENZ transaction is not completed, based on the

liquidation scenario previously provided by Graphite's management and the discussions at prior Transaction Committee meetings, it was the Transaction Committee's view that a liquidation and dissolution of Graphite was not reasonably likely to create greater value for Graphite stockholders than the anticipated transaction with LENZ even with a reduced amount of committed proceeds to the Graphite private placement at the time of the execution of the merger agreement. The participants also discussed the possible advantages and disadvantages to Graphite's stockholders of a potential cash tender offer at a discount to its net cash value. The Transaction Committee indicated its support for continuing its current process of finalizing the reverse merger transaction with LENZ on its current terms and timeline, which would deliver value to Graphite stockholders in excess of its net cash value. Following discussion, the participants discussed the timeline for LENZ to secure the Graphite private placement and the impact of such timeline on the timing of the merger and related matters. At the conclusion of the discussion, the Transaction Committee determined to set a deadline of November 16, 2023 (the exclusivity expiration date) for LENZ to obtain at least $50 million in commitments for the Graphite private placement. This deadline was then communicated by Graphite's management to LENZ.

On November 13, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present. Graphite's management and representatives of Goodwin and Leerink Partners provided an update on the status of negotiations with LENZ and the status of the transaction documents. The participants discussed the status of the Graphite private placement, noting that the size of the financing at the time of execution of the merger agreement was now projected to be $50 million rather than the $75 million as initially predicted and the fact that such occurrence had no impact on LENZ's expectations regarding its ability to fund its operations to profitability. Representatives of Goodwin reviewed the fiduciary duties under Delaware law of the Graphite board of directors in connection with the proposed merger with LENZ, the terms of the Merger Agreement and the forms of subscription agreement, support agreement and lock-up agreement. The meeting participants noted that Dr. Davis is a managing director at Versant Ventures and Dr. Rizzuto is a partner and managing director at Versant Ventures, and that Versant is an investor in LENZ, and a representative of Versant, Clare Ozawa, serves on the board of directors of LENZ.

The meeting participants reviewed the due diligence process that Graphite and its representatives undertook to evaluate LENZ, including its technology, pipeline, commercial prospects, regulatory interactions, clinical plans and data, intellectual property, legal and compliance matters, financial position and other matters. Representatives of Leerink Partners and Goodwin discussed with the Graphite board of directors that the exchange ratio in the merger agreement, which provided for a 65% and 35% ownership split for the LENZ and Graphite equityholders in the post-closing company, respectively, was based on an assumed $126.5 million valuation of Graphite (assuming net cash of $115 million and an enterprise value of Graphite of $11.5 million) and an assumed $231.6 million valuation for LENZ, before giving effect to the Graphite private placement. Representatives of Leerink Partners and Goodwin also discussed with the Graphite board of directors that LENZ had secured approximately $53.5 million for the Graphite private placement, with the potential to secure additional PIPE financing commitments following the execution of the merger agreement. Representatives of Leerink Partners then reviewed and discussed with the Graphite board of directors Leerink Partners' preliminary financial analysis with respect to Graphite, LENZ and the proposed terms of the merger. In addition, the Graphite board of directors reviewed and discussed an analysis of the cash that might be distributed to Graphite stockholders if Graphite were to liquidate instead of executing a reverse merger transaction, as described in the section titled "*The Merger—Certain Unaudited Prospective Financial Information—Graphite Liquidation Analysis*" beginning on page 169 of this proxy statement/prospectus. The Transaction Committee reviewed with the Graphite board of directors its prior discussions and views regarding these matters.

Representatives of Leerink Partners led a discussion regarding long-term financial projections of the operating results of LENZ through December 31, 2036 and related underlying assumptions regarding LENZ, prepared by Graphite's management, a copy of which projections had been provided to the Graphite board of directors, and described the input it had received with respect to such projections from LENZ, as described in the section entitled "*The Merger—Certain Unaudited Prospective Financial Information*" beginning on page 165 of

this proxy statement/prospectus. Following discussion, the Graphite board of directors approved the use of certain projections by Leerink Partners in its analysis of the fairness of the proposed merger between Graphite and LENZ to the stockholders of Graphite.

On November 14, 2023, the Graphite board of directors held a meeting at which members of Graphite's management and representatives of Leerink Partners and Goodwin were present, to consider approval of the proposed transaction with LENZ. Representatives of Goodwin indicated that the Merger Agreement, the subscription agreement and all other ancillary documents associated with the proposed merger with LENZ were in final form, with no material changes to any of the terms that had been reviewed at the November 13 meeting. Representatives of Goodwin then reminded the Graphite board of directors of its fiduciary duties under Delaware law in connection with a merger, which had been discussed with the Graphite board of directors throughout the process. Representatives of Leerink Partners then reviewed Leerink Partners' financial analysis with respect to Graphite, LENZ and the proposed terms of the merger. Thereafter, at the request of the Graphite board of directors, Leerink Partners rendered to the Graphite board of directors its oral opinion, which was subsequently confirmed by delivery of a written opinion dated November 14, 2023, that, as of such date and based upon and subject to the various assumptions made, and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement was fair, from a financial point of view, to Graphite. For a detailed discussion of Leerink Partners' opinion, please see heading titled "*The Merger—Opinion of Leerink Partners LLC*" beginning on page 169 of this proxy statement/prospectus.

Dr. Davis and Dr. Rizzuto then left the meeting and the remaining directors met in executive session with representatives of Goodwin present. After discussion, the Transaction Committee (except for Dr. Davis, who was not present) unanimously recommended that the Graphite board of directors approve Graphite's entry into the Merger Agreement for the transaction with LENZ on the terms presented at this meeting. After further discussion, based on the factors cited in "*The Merger—Graphite's Reasons for the Merger*" beginning on page 159 of this proxy statement/prospectus, the Graphite board of directors (excluding Dr. Davis and Dr. Rizzuto, who were not present) unanimously: (i) determined that the merger and the related transactions contemplated by the Merger Agreement are fair to, advisable and in the best interests of Graphite and its stockholders, (ii) approved and declared advisable the Merger Agreement and the related transactions contemplated by the Merger Agreement, including the issuance of shares of Graphite common stock to the stockholders of LENZ pursuant to the Merger Agreement and the support agreements, (iii) determined and declared that the 2024 Equity Incentive Plan and the 2024 ESPP and the Charter Amendment Proposal are advisable and in the best interests of Graphite and its stockholders, (iv) determined to recommend, upon the terms and subject to the conditions set forth in the Merger Agreement, that the Graphite stockholders vote to approve the 2024 Plan and the 2024 ESPP and (v) determined to recommend, upon the terms and subject to the conditions set forth in the Merger Agreement, as promptly as practicable after the forms thereof are mutually agreed to by Graphite and LENZ, that the Graphite stockholders vote to approve the Charter Amendment Proposal.

Later on November 14, 2023, the parties finalized and executed the merger agreement, the subscription agreement, the stockholder support agreements and the lock-up agreements.

On the morning of November 15, 2023, prior to the opening of trading on the Nasdaq market, Graphite and LENZ issued a joint press release announcing entry into the merger agreement and that Graphite had entered into a subscription agreement to result in gross proceeds to Graphite of approximately $53.5 million.

Graphite's Reasons for the Merger

During the course of its evaluation of the Merger Agreement and the transactions contemplated by the Merger Agreement, the Graphite board of directors held numerous meetings, consulted with Graphite's management, Graphite's consultants and advisors, outside legal counsel and financial advisor, and reviewed and assessed a significant amount of information. In reaching its decision to approve the Merger Agreement and the

transactions contemplated by the Merger Agreement, the Graphite board of directors considered a number of factors that it viewed as supporting its decision to approve the Merger Agreement, including:

- the financial condition and prospects of Graphite and the risks associated with continuing to operate Graphite on a stand-alone basis, particularly in light of Graphite's February 2023 decision to discontinue the development of nula-cel, initiate a process to explore strategic alternatives and reduce its workforce;
- that the Graphite board of directors and its financial advisor undertook a comprehensive and thorough process of reviewing and analyzing potential strategic alternatives and merger partner candidates and the Graphite board of directors' view that no alternatives to the merger (including remaining a standalone company, a liquidation and dissolution of Graphite and the distribution of any available cash, a cash tender offer at a discount to net cash value, and alternative strategic transactions) were reasonably likely to create greater value to Graphite's stockholders;
- the Graphite board of directors' conclusion that the merger would provide Graphite's existing stockholders a significant opportunity to participate in the potential growth of the combined company following the merger, which will focus on LENZ's product candidates, while also receiving a cash payment following the closing of the merger on account of the special cash dividend;
- the Graphite board of directors' belief, after thorough review of strategic alternatives and discussions with Graphite's management, outside legal counsel and financial advisor, that the merger is more favorable to Graphite's stockholders than the potential value that might have resulted from other strategic alternatives available to Graphite, including a liquidation and dissolution of Graphite and the distribution of any available cash or a cash tender offer at a discount to net cash value;
- the Graphite board of directors' belief, after thorough discussions with Graphite's management and Graphite's consultants and advisors, that a potential liquidation and dissolution was not reasonably likely to create greater value for Graphite's stockholders than a strategic alternative transaction based on, among other things, the need to hold back a meaningful amount of Graphite's current cash balance to cover current and potential future liabilities, including those triggered by a liquidation strategy;
- the Graphite board of directors' belief that the $11.5 million enterprise value ascribed to Graphite, in addition to Graphite's anticipated $175 million net cash position, would provide the existing Graphite stockholders significant value for Graphite's public listing, and afford the Graphite stockholders a significant opportunity to participate in the potential growth of the combined company following the merger at the negotiated exchange ratio;
- the Graphite board of directors' belief, after a thorough review of strategic alternatives, such as attempting to further advance the development of its internal programs, entering into a licensing, sale or other strategic agreement related to certain assets sufficient to fund operations, combining with other potential strategic transaction candidates, and discussions with Graphite's management, financial advisors and legal counsel, that the merger is more favorable to Graphite stockholders than the potential value that might have resulted from other strategic alternatives available to Graphite;
- the Graphite board of directors' belief that, as a result of arm's length negotiations with LENZ, Graphite and its representatives negotiated the highest exchange ratio to which LENZ was willing to agree and that the other terms of the Merger Agreement include the most favorable terms to Graphite in the aggregate to which LENZ was willing to agree;
- the Graphite board of directors' positive view, based on the scientific, regulatory and technical due diligence conducted by Graphite's management and advisors, of the regulatory pathway for, and potential significant market opportunity of, LENZ's product candidates, which will be the focus of the combined company;
- the Graphite board of directors' consideration of the expected cash balances of the combined company as of the closing of the merger resulting from the approximately $115 million of net cash expected to

be contributed to the combined entity by Graphite upon completion of the merger together with the cash LENZ currently holds and the expected gross proceeds of no less than $50 million from the Concurrent PIPE Financing;

- the Graphite board of directors' view, following a review with Graphite's management and advisors of LENZ's current development and clinical trial plans, of the likelihood that the combined company would possess sufficient cash resources at the closing of the merger, or have access to sufficient resources, to fund continued development of LENZ's product candidates through upcoming value inflection points;
- the prospects of and risks associated with the other strategic candidates that had made proposals for a strategic transaction with Graphite based on the scientific, technical and other due diligence conducted by Graphite's management and advisors;
- the Graphite board of directors' view that the combined company will be led by an experienced senior management team from LENZ and a board of directors with representation from each of the current boards of directors of LENZ and Graphite;
- the current financial market conditions and historical market prices, volatility and trading information with respect to Graphite common stock; and
- the opinion of Leerink Partners, rendered orally to the Graphite board of directors on November 14, 2023 (and subsequently confirmed in writing by delivery of Leerink Partners' written opinion, dated November 14, 2023) that, as of such date and based upon and subject to the various assumptions made, and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement was fair, from a financial point of view, to Graphite, as more fully described below in the section titled "*The Merger—Opinion of Leerink Partners LLC*," beginning on page 169 of this proxy statement/prospectus.

The Graphite board of directors also reviewed the terms of the Merger Agreement and related transaction documents, including those described below, and concluded that the terms of the Merger Agreement and related transaction documents, in the aggregate, were reasonable under the circumstances:

- the calculation of the exchange ratio, closing net cash and the estimated number of shares of Graphite common stock to be issued in the merger, including that the valuation of Graphite under the Merger Agreement would be reduced to the extent that Graphite's closing net cash is less than $174 million and increased to the extent Graphite's closing net cash exceeds $176 million, which would result in a decrease or increase, as applicable, in the ownership of the pre-merger Graphite stockholders in the combined company;
- the number and nature of the conditions to Graphite's and LENZ's respective obligations to complete the merger and the likelihood that the merger will be completed on a timely basis, as more fully described below in the caption "*The Merger Agreement–Conditions to the Completion of the Merger*," beginning on page 218 of this proxy statement/prospectus;
- the respective rights of, and limitations on, Graphite and LENZ under the Merger Agreement to consider and engage in discussions regarding unsolicited acquisition proposals under certain circumstances, and the limitations on the board of directors of each party to change its recommendation in favor of the merger, as more fully described below under the caption "*The Merger Agreement–No Solicitation*," beginning on page 212 of this proxy statement/prospectus;
- the potential termination fee of $7.5 million, which would become payable by either Graphite or LENZ to the other party if the Merger Agreement is terminated in certain circumstances, as more fully described below under the caption" *The Merger Agreement–Termination and Termination Fees*," beginning on page 221 of this proxy statement/prospectus;

- the lock-up agreements, pursuant to which certain stockholders of LENZ and Graphite, respectively, have, subject to certain exceptions, agreed not to transfer their shares of the combined company common stock during the period of 90 days following the completion of the merger, as more fully described below under the caption "*Agreements Related to the Merger–Lock-Up Agreements*," beginning on page 224 of this proxy statement/prospectus; and
- the support agreements, pursuant to which certain stockholders of LENZ and Graphite, respectively, have agreed, solely in their capacities as stockholders, to vote their shares of LENZ common stock or Graphite common stock, respectively, in favor of the proposals submitted to them in connection with the merger, as more fully described in "*Agreements Related to the Merger–Support Agreements*," beginning on page 224 of this proxy statement/prospectus.

In the course of its deliberations, the Graphite board of directors and also considered a variety of risks and other countervailing factors related to entering into the merger, including:

- the $7.5 million termination fee payable by Graphite upon the occurrence of certain events and the potential effect of such termination fee in deterring other potential acquirors from proposing an alternative acquisition that may be more advantageous of Graphite's stockholders;
- the substantial expenses to be incurred by Graphite in connection with the merger;
- the prohibition on Graphite to solicit alternative acquisition proposals during the pendency of the merger;
- the possible volatility of the trading price of Graphite common stock resulting from the announcement, pendency or completion of the merger;
- the risk that the merger might not be consummated in a timely manner or at all and the potential effect of the public announcement of the merger or the failure to complete the merger on the reputation of Graphite;
- the scientific, technical, regulatory and other risks and uncertainties associated with development and commercialization of LENZ's product candidates; and
- the various other risks associated with the combined company and the proposed transaction, including those described in the sections titled "*Risk Factors*" and "*Cautionary Note Regarding Forward-Looking Statements*" beginning on pages 26 and 126, respectively, of this proxy statement/prospectus.

In addition, the Graphite board of directors was aware of and considered the interests of its directors and executive officers that may be different from, or in addition to, the interests of the Graphite stockholders generally when approving the Merger Agreement and the merger, and to recommend that the Graphite stockholders approve the proposals to be presented to the Graphite stockholders for recommendation at the Graphite special meeting as contemplated by this proxy statement/prospectus. For more information, see section titled "*Interests of Graphite Directors and Executive Officers in the Merger.*"

The foregoing information and factors considered by the Graphite board of directors are not intended to be exhaustive but are believed to include all of the material factors considered by the Graphite board of directors. In view of the wide variety of factors considered in connection with its evaluation of the merger and the complexity of these matters, the Graphite board of directors did not find it useful to attempt, and did not attempt, to quantify, rank or otherwise assign relative weights to these factors. In considering the factors described above, individual members of the Graphite board of directors may have given different weight to different factors. The Graphite board of directors conducted an overall analysis of the factors described above, including thorough discussions with, and questioning of, Graphite's management, outside legal counsel and financial advisor, and considered the factors overall to be favorable to, and to support, its determination.

LENZ's Reasons for the Merger

In the course of reaching its decision to approve the merger, the LENZ board of directors held numerous meetings, consulted with LENZ's senior management, its financial advisors and legal counsel, and considered a wide variety of factors including, among others, the following material factors (which factors are not necessarily presented in any order of relative importance):

- the merger will provide LENZ's current stockholders with greater liquidity by owning publicly-traded stock, and expanding both the access to capital for LENZ and the range of investors potentially available as a public company, compared to the investors LENZ could otherwise gain access to if it continued to operate as a privately-held company;
- the Graphite private placement will generate capital resources to fund the combined company;
- the historical and current information concerning LENZ's business, including its financial performance and condition, operations, management and strategic objectives and prospects;
- the prospects of LENZ as a stand-alone entity and the possible strategic growth opportunities that may be available to LENZ in the absence of the merger;
- the current economic, industry and market conditions affecting LENZ;
- the competitive nature of the industry in which LENZ operates;
- the LENZ board of directors' fiduciary duties to LENZ's stockholders;
- the LENZ board of directors' belief that no alternatives to the merger, together with the Graphite private placement, were reasonably likely to create greater value for LENZ stockholders, after reviewing the various financing and other strategic options to enhance stockholder value that were considered by the LENZ board, including the following with respect to an initial public offering:
  - the likelihood that LENZ would need additional financing prior to an initial public offering;
  - the risk that a market for an initial public offering would not be available at the time at which LENZ would need to seek additional financing;
  - the merger, together with the Graphite private placement, would be a higher probability and more cost-effective means to access capital than an initial public offering or other options; and
  - the LENZ board of directors' expectation that the merger, together with the Graphite private placement, is expected to achieve more capital than otherwise would have been available in an initial public offering;
- the projected financial position, operations, management, operating plans and financial projections of the combined company;
- the expected resources of the combined company (including the ability to support the combined company's current operations and to continue to build infrastructure and successfully commercialize LENZ's lead product candidate, subject to the successful completion of the ongoing Phase 3 trials, NDA submission and subsequent FDA approval);
- the terms and conditions of the Merger Agreement, including the following:
  - the determination that the expected relative percentage ownership of Graphite's stockholders and LENZ's stockholders in the combined company was appropriate, based on the LENZ board of directors' judgment and assessment of the approximate valuations of Graphite (including the value of the net cash Graphite is expected to provide to the combined company) and LENZ;
  - the exchange ratio used to establish the number of shares of Graphite's common stock to be issued to LENZ's stockholders in the merger is reasonable and appropriately measures the per share value of LENZ and Graphite, including by accounting for adjustments due to Graphite's cash balance, and their respective outstanding capital stock at closing (subject to certain limitations);

- the expectation that the merger will be treated for U.S. federal income tax purposes as a "reorganization" within the meaning of Section 368(a) of the Code with the result that in the merger the LENZ stockholders will generally not recognize taxable gain or loss for U.S. federal income tax purposes;
- the limited number and nature of the conditions of the obligation of Graphite to consummate the merger;
- the rights of LENZ under the Merger Agreement to consider certain unsolicited acquisition proposals under certain circumstances should LENZ receive a superior proposal;
- the conclusion of the LENZ board of directors that the potential termination fees of $7.5 million payable by Graphite to LENZ in certain circumstances and by LENZ to Graphite in certain other circumstances, and the circumstances when such fees may be payable, were reasonable;
- the belief that the other terms of the Merger Agreement, including the parties' representations, warranties and covenants, and the conditions to their respective obligations, were reasonable in light of the entire transaction;

- the shares of Graphite's common stock issued to LENZ's stockholders will be registered on a Form S-4 registration statement and will become freely tradable for LENZ's stockholders who are not affiliates of LENZ and who are not parties to lock-up agreements;
- the support agreements, pursuant to which certain directors, officers and stockholders of LENZ and Graphite, respectively, have agreed, solely in their capacity as stockholders of LENZ and Graphite, respectively, to vote all of their shares of LENZ capital stock or Graphite common stock in favor of the adoption or approval, respectively, of the Merger Agreement;
- the ability to obtain a Nasdaq listing and the change of the combined company's name to LENZ Therapeutics, Inc. upon the closing of the merger; and
- the likelihood that the merger will be consummated on a timely basis.

The LENZ board of directors also considered a number of uncertainties and risks in its deliberations concerning the merger and the other transactions contemplated by the Merger Agreement, including the following:

- the possibility that the merger might not be completed and the potential adverse effect of the public announcement of the merger on the reputation of LENZ and the ability of LENZ to carry on its business and obtain financing in the future in the event the merger is not completed;
- the risk of a limited ability to proceed with an initial public offering in the event the merger is not completed;
- the risk that future sales of common stock by existing Graphite stockholders may cause the price of Graphite common stock to fall, thus reducing the potential value of Graphite common stock received by LENZ stockholders following the merger;
- the risk of the merger structure resulting in a more concentrated shareholder base than would generally be expected in an initial public offering, which could impact stockholder liquidity and increase volatility in the price of the common stock of the combined company;
- the termination fee payable by LENZ to Graphite upon the occurrence of certain events, and the potential effect of such termination fee in deterring other potential acquirers from proposing an alternative transaction that may be more advantageous to LENZ's stockholders;
- the potential reduction of Graphite's net cash prior to the closing;
- the possibility that Graphite could, under certain circumstances, consider unsolicited acquisition proposals if superior to the merger or change its recommendation to approve the merger upon certain events;

- the possibility that the merger might not be completed in a timely manner or at all, for a variety of reasons, such as the failure of Graphite to obtain the required stockholder vote or the failure to close the Graphite private placement, and the potential adverse effect on the reputation of LENZ and the ability of LENZ to obtain financing in the future in the event the merger is not completed;
- the costs involved in connection with completing the merger, the time and effort of LENZ senior management required to complete the merger, the related disruptions or potential disruptions to LENZ's business operations and future prospects, including its relationships with its employees, suppliers and partners and others that do business or may do business in the future with LENZ, and related administrative challenges associated with combining the companies;
- the additional expenses and obligations to which LENZ's business will be subject following the merger that LENZ has not previously been subject to, and the operational changes to LENZ's business, in each case that may result from being a public company;
- the fact that the representations and warranties in the Merger Agreement do not survive the closing of the merger and the potential risk of liabilities that may arise post-closing;
- the ongoing liability under the existing contracts that would remain with Graphite and the combined company following the closing;
- the possibility that unaffiliated stockholders may be less protected as investors from any material issues with respect to LENZ's business than an investor in an initial public offering because of the absence of due diligence conducted by an underwriter that would be subject to liability for any material misstatements or omissions in a registration statement; and
- various other risks associated with the combined company and the merger, including the risks described in the section titled "*Risk Factors*" in this proxy statement/prospectus.

The foregoing information is not intended to be exhaustive but summarizes the material factors considered by the LENZ board of directors in its consideration of the Merger Agreement and the transactions contemplated. The LENZ board of directors concluded that the benefits, advantages and opportunities of a potential transaction outweighed the uncertainties and risks described above. After considering these and other factors, the LENZ board of directors unanimously approved the Merger Agreement, the merger and the other transactions contemplated by the Merger Agreement.

Certain Unaudited Prospective Financial Information

Graphite does not, as a matter of course, publicly disclose forecasts or projections as to future performance, earnings or other results due to the inherent unpredictability of the underlying assumptions, estimates and projections. However, as described in "*The Merger—Background of the Transaction*," in connection with its evaluation of the merger, the Graphite transaction committee and Graphite board of directors considered certain unaudited, non-public financial projections with respect to LENZ as developed by Graphite management, based on discussions with and materials provided by LENZ to Graphite management. On October 19, 2023, Graphite management received information regarding LENZ's business and product candidates from LENZ, including preliminary prospective financial information prepared by LENZ management and forecasted headcount for the quarter ending December 31, 2023 and each of the fiscal years ending December 31, 2024 through 2027, forecasted license milestones in the fiscal year ending December 31, 2025 and 2026, and price, costs, and forecasted patients using an approved and commercialized LENZ product for each of the fiscal years ending December 31, 2023 through 2036. Graphite management evaluated this information and applied Graphite management's judgment to finalize its view regarding the estimated enterprise value of LENZ Graphite management assessed the potential market size and revenue potential of LENZ's clinical programs, effective tax rate, the costs to be incurred in launching such programs, and their risk profile in order to prepare the financial forecast for the quarter ending December 31, 2023 and each of the fiscal years ending December 31, 2024 through 2036 (the "Graphite management LENZ non risk-adjusted projections"), which were impacted by certain probabilities of success ("PoS"), as provided by Graphite management, for each forecasted program to reflect

Graphite's probability-adjusted outlook (the "Graphite management LENZ risk-adjusted projections," and together with the Graphite management LENZ non risk-adjusted projections, the "Graphite management LENZ projections").

Also, at the direction of the Graphite transaction committee and in connection with the evaluation of the proposed transaction with LENZ or potential alternatives, Graphite management prepared an analysis with respect to Graphite's estimated value to its stockholders in a liquidation scenario, including an estimate of the net cash that would be available for distribution to Graphite stockholders in connection with any such potential future liquidation or dissolution (the "Graphite liquidation analysis"). The Graphite liquidation analysis was based on certain assumptions and estimates of Graphite regarding asset values, liabilities, potential proceeds from asset sales, wind-down costs and expenses, reserves for contingent liabilities, interest income, taxes, estimates for timing and quantum of distributions to stockholders, and other relevant factors relating to the potential wind-down of Graphite's operations.

The Graphite management LENZ projections and the Graphite liquidation analysis (which are collectively referred to as the "Graphite forecasts") were provided to and considered by the Graphite transaction committee and the Graphite board of directors in connection with their respective evaluations of the transactions contemplated by the Merger Agreement and Graphite's other strategic alternatives. The Graphite board of directors directed Leerink Partners to use the Graphite management LENZ risk-adjusted projections as described below in its financial analyses and for purposes of its fairness opinion (as summarized below under the section titled "—*Opinion of Leerink Partners LLC*"). The Graphite management LENZ risk-adjusted projections (together with the related unlevered free cash flows) were the only financial projections relied upon by Leerink Partners in rendering its fairness opinion. While Leerink Partners was provided with a copy of the Graphite liquidation analysis and provided an opportunity to discuss the analysis with Graphite management, the Graphite liquidation analysis was solely directed to and for the information of the Graphite transaction committee and the Graphite board of directors. Leerink Partners did not rely on the Graphite liquidation analysis when rendering its opinion. The Graphite forecasts were not provided to LENZ.

The summaries of the Graphite forecasts are not being included in this proxy statement/prospectus to influence any stockholder's decision whether to vote for the Nasdaq Stock Issuance Proposal or for any other related purpose. The summaries of the Graphite forecasts are being included in this proxy statement/prospectus because the Graphite forecasts were provided to the Graphite transaction committee and the Graphite board of directors to evaluate strategic alternatives considered by the Graphite transaction committee and the Graphite board of directors, including the transactions contemplated by the Merger Agreement, and to Leerink Partners. The summaries of the Graphite management LENZ non risk-adjusted forecasts are being included in this proxy statement/prospectus for informational purposes only and neither the Graphite board of directors nor Leerink Partners relied on the Graphite management LENZ non risk-adjusted forecasts. The Graphite forecasts may differ from publicized analyst estimates and forecasts and, in each instance, do not take into account any events or circumstances after the date they were prepared, including the announcement of the merger.

Each of the Graphite forecasts, although presented with numerical specificity, are necessarily based on numerous variables, estimates and assumptions that are inherently uncertain, and many of which are beyond Graphite's control. Modeling and forecasting the future development and commercialization of drug candidates by an emerging biotechnology company is a highly speculative endeavor. Because the Graphite forecasts span multiple years, by their nature they will become subject to greater uncertainty with each successive year and are unlikely to anticipate each circumstance that will have an effect on the combined company's business and its results of operations. Each of the Graphite forecasts was prepared by Graphite management based on certain estimates and assumptions with respect to general business, economic, competitive, regulatory, reimbursement and other market and financial conditions and other future events, all of which are difficult to predict and many of which are beyond Graphite's control. Although Graphite believes its assumptions about LENZ to be reasonable, all financial projections are inherently uncertain, and Graphite expects that differences will exist between actual and projected results. As a result, there can be no assurance that any of the Graphite forecasts accurately reflect future trends or, in

the case of the Graphite management LENZ projections, accurately estimate the future market for LENZ's products or product candidates. There also can be no assurance that LENZ will obtain the regulatory approvals necessary for the commercialization of its products or product candidates, or that LENZ's competitors will not commercialize products that are safer, more effective, or more successfully marketed and sold than any product that LENZ may market or commercialize. The Graphite forecasts are subject to many risks and uncertainties and you are urged to review the section titled "*Risk Factors*" beginning on page 26 of this proxy statement/prospectus for a description of risk factors relating to the merger and LENZ's business. You should also read the section titled "*Cautionary Note Regarding Forward-Looking Statements*" beginning on page 126 of this proxy statement/prospectus for additional information regarding the risks inherent in forward-looking information such as the Graphite forecasts. The Graphite forecasts were not reviewed or approved by LENZ management, its board of directors or its advisors. In addition, the Graphite forecasts will be affected by LENZ's ability to achieve strategic goals, objectives and targets over the applicable period. Accordingly, there can be no assurance that any of the Graphite forecasts will be realized, and actual results may vary materially from those shown.

The Graphite forecasts were not prepared with a view toward complying with U.S. generally accepted accounting principles ("GAAP"), the published guidelines of the SEC regarding projections or the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information. Neither Graphite's independent registered public accounting firm nor any other independent accountant has audited, reviewed, compiled or performed any procedures with respect to any of the Graphite forecasts or expressed any opinion or any form of assurance related thereto, nor have they expressed any opinion or any other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the prospective financial information. Each of the Graphite forecasts was developed solely using the information available to Graphite management at the time they were created and reflect assumptions as to certain business decisions that are subject to change. None of Graphite, LENZ nor any of their respective affiliates, advisors, officers, directors or representatives has made or makes any representation or warranty to any Graphite or LENZ stockholders regarding the ultimate performance of Graphite or LENZ compared to the information contained in any of the Graphite forecasts, the likelihood that the Graphite forecasts will be achieved consistent with any of the Graphite forecasts or at all, the results of LENZ's clinical trials, the potential timing and approval of commercial launch of any of LENZ's future products, the effectiveness or marketability of LENZ's product candidates, or the overall future performance of Graphite or LENZ.

None of Ernst & Young LLP, Deloitte & Touche LLP, or any other independent accountant has compiled, reviewed, examined, performed any other assurance procedures, or expressed any form of assurance with respect to the prospective financial information included in this proxy statement/prospectus. The report of Ernst & Young LLP included in this proxy statement/prospectus relates to LENZ's historical audited financial statements and does not extend to the unaudited prospective financial information and should not be read to do so. The report of Deloitte & Touche LLP included in this proxy statement/prospectus relates to Graphite's historical audited financial statements and does not extend to the unaudited prospective financial information and should not be read to do so.

Certain of the measures included in the Graphite forecasts, including unlevered free cash flow, are financial measures that are not calculated in accordance with GAAP. Such non-GAAP financial measures should not be viewed as a substitute for GAAP financial measures, and may be different from non-GAAP financial measures used by other companies. Furthermore, there are limitations inherent in non-GAAP financial measures, because they exclude charges and credits that are required to be included in a GAAP presentation. Accordingly, non-GAAP financial measures should be considered together with, and not as an alternative to, financial measures prepared in accordance with GAAP. Unlevered free cash flow should not be considered as an alternative to operating income or net income as a measure of operating performance.

Financial measures provided to a financial advisor are excluded from the definition of non-GAAP financial measures and, therefore, are not subject to SEC rules regarding disclosures of non-GAAP financial measures, which would otherwise require a reconciliation of a non-GAAP financial measure to a GAAP financial measure. Reconciliations of non-GAAP financial measures were not relied upon by Leerink Partners for purposes of its financial analysis as described above in the section titled "—*Opinion of Leerink Partners LLC*" or by the Graphite

transaction committee or the Graphite board of directors in connection with their consideration of the merger. Accordingly, Graphite undertakes no obligation to update or otherwise revise or reconcile any of the Graphite forecasts to reflect circumstances existing after the date such Graphite forecasts were generated or to reflect the occurrence of future events. None of Graphite, or, to the knowledge of Graphite, LENZ, intends to make publicly available any update or other revisions to any of the Graphite forecasts, except as otherwise required by law.

Graphite Management LENZ Non Risk-Adjusted Projections

Set forth below is a summary of the Graphite management LENZ non risk-adjusted projections, which are select projected financial information for LENZ for the remainder of fiscal year 2023 and fiscal years 2024 through 2036 based on information as prepared by Graphite management in connection with Graphite's evaluation of the merger. The Graphite management LENZ non risk-adjusted projections were not probability-adjusted and included, among other things, the following key assumptions regarding LENZ's product candidates and 2025-2035 research and development costs, 2025-2036 sales and marketing costs, and 2025-2036 general and administrative costs, in each case as to which there can be no assurance: U.S. Presbyopia patient prevalence of approximately 120 million; LENZ's product candidate becomes commercially available in the U.S. in 2025; the U.S. being the principal market for LENZ's product candidate; 1% year over year prevalence growth; a $79 per pack gross price at launch (based on the existing market price for Vuity, the first miotic-based eye drop approved by the FDA in late 2021), with a 2% year over year gross price growth; an October 2025 launch timing as compared to LENZ's mid-2025 planned launch timing per discussions between LENZ management and Graphite management; 70% patient compliance rate; 40% new patient dropout rate; 10% existing patient dropout rate after one year of treatment (25% after 8 years of launch); a peak weekly new patient prescriptions amount of approximately 8,000 in 2032; a peak annual new patient prescriptions amount of approximately 398,000 in 2032; a peak annual patients refills amount of approximately 10 million in 2036; patent protections for LNZ100 or LNZ101 expiring in 2036; assuming only one product candidate would be approved and commercialized consistent with LENZ's plans per discussions between LENZ management and Graphite management; a peak cumulative penetration amount into prevalent population of approximately 2% in 2036 based on a 7% linear annual penetration into untreated patients for eight years followed by a 3% annual penetration for subsequent years due to Graphite management's view of other potential competitive products; and that no LENZ product candidates other than LNZ100 or LNZ101 would be approved or commercialized consistent with LENZ's plans per discussions between LENZ management and Graphite management. The Graphite management LENZ non risk-adjusted projections for the applicable periods are summarized below (in millions):

	Q4 2023	2024	2025	2026	2027	2028	2029
Total Net Revenue	—	—	$ 14	$ 63	$122	$193	$275
Operating Income	($ 21)	($ 47)	($ 66)	($ 38)	$ 18	$ 75	$140

	2030	2031	2032	2033	2034	2035	2036
Total Net Revenue	$ 368	$ 472	$ 586	$ 701	$714	$731	$766
Operating Income	$ 214	$ 297	$ 389	$ 479	$487	$498	$523

Graphite Management LENZ Risk-Adjusted Projections

Set forth below is a summary of the Graphite management LENZ risk-adjusted projections, which were calculated based on the Graphite management LENZ non risk-adjusted projections, which were probability-adjusted to reflect Graphite management's assessment of the following: sales and marketing costs; a 60% PoS adjustment to 2025-2027 general and administrative costs; a 75% PoS adjustment to 2025-2027 research and development costs; a cumulative 60% PoS adjustment to 2028-2036 operating expenses; and a cumulative 60% PoS adjustment for U.S. revenue from the approved product (LNZ100 or LNZ101), assuming only one product candidate would be approved and commercialized, which was based on historical, ophthalmology therapeutic area-specific drug development success rates due to the fact that the Phase 3 trials and registration were not yet complete. The Graphite management LENZ risk-adjusted projections, as well as estimated, probability-adjusted unlevered free

cash flow for LENZ, which were calculated based on the Graphite management LENZ risk-adjusted projections and other projected financial information provided by Graphite management and used by Leerink Partners in connection with its fairness opinion, for the applicable periods are summarized below (in millions):

	Q4 2023	2024	2025	2026	2027	2028	2029
Total Net Revenue	—	—	$ 13	$ 40	$ 73	$116	$165
Operating Income	($ 21)	($ 47)	($ 40)	($ 24)	$ 9	$ 45	$ 84
Unlevered Free Cash Flow(1)	($ 21)	($ 47)	($ 40)	($ 27)	$ 4	$ 38	$ 75

	2030	2031	2032	2033	2034	2035	2036
Total Net Revenue	$ 221	$ 283	$ 351	$ 421	$428	$438	$460
Operating Income	$ 128	$ 178	$ 233	$ 288	$292	$299	$314
Unlevered Free Cash Flow(1)	$ 97	$ 128	$ 168	$ 209	$219	$223	$233

(1) Unlevered free cash flow is a non-GAAP financial measure defined as operating income, less taxes, less change in net working capital. Assumes tax rate of 25%.

Graphite Liquidation Analysis

The Graphite liquidation analysis represents a range of estimates of Graphite's aggregate net cash which could be available for distribution to Graphite stockholders in a scenario in which Graphite winds down its operations and liquidates. For purposes of this analysis, such range of estimates of Graphite's aggregate cash was determined by Graphite management as follows: estimated net balance sheet liquidation value of Graphite (calculated as total assets minus total liabilities), plus estimated proceeds from assumed asset sales during the wind-down period, less estimated wind-down costs (taking into account a reserve for contingent liabilities), plus estimated interest income during the wind-down period, on a net after-tax basis. Key assumptions underlying the Graphite liquidation analysis included: (i) wind-down processes commencing in October 2023; (ii) an assumed initial pre-dissolution liquidating distribution to Graphite stockholders in the amount of approximately $166.8 million in February 2024, after deducting costs and expenses, including legal fees, the fees payable to Graphite's strategic financial advisor, accounting fees, employee retention bonuses, severance and benefits, insurance expenses and other transaction-related costs, with no adjustments for taxes; and (iii) the assumed completion of the liquidation and dissolution process and a liquidating distribution of all remaining net cash to Graphite stockholders in March 2027. The analysis resulted in an estimated cash distribution per share in February 2024 of $2.86 per share, as well as an estimated range of after-tax liquidation values at March 2027 (i.e., the estimated aggregate available cash for distribution to holders of Graphite common stock as of such date) of $5.6 million in the low case and $11.1 million in the high case, and an estimated cash distribution per share in March 2027 of $0.10 per share in the low case or $0.19 in the high case.

In light of the foregoing factors and the uncertainties inherent in each of the Graphite forecasts, stockholders are cautioned not to place undue reliance on the Graphite forecasts.

Opinion of Leerink Partners LLC

Introduction

Graphite retained Leerink Partners as its financial advisor in connection with the merger and the other transactions contemplated by the Merger Agreement. In connection with this engagement, the Graphite board of directors requested that Leerink Partners evaluate the fairness, from a financial point of view, to Graphite of the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement. On November 14, 2023, Leerink Partners rendered to the Graphite board of directors its oral opinion, which was subsequently confirmed by delivery of a written opinion dated November 14, 2023, that, as of such date and based upon and subject to the various assumptions made, and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, the exchange ratio proposed to be paid by Graphite pursuant to the terms

of the Merger Agreement was fair, from a financial point of view, to Graphite. In providing its opinion, Leerink Partners noted that the exchange ratio is subject to certain adjustments set forth in the Merger Agreement, and Leerink Partners expressed no opinion as to any such adjustments.

The full text of the written opinion of Leerink Partners, dated November 14, 2023, which describes the assumptions made and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion, is attached as *Annex B* to this proxy statement/prospectus and is incorporated herein by reference. The summary of the written opinion of Leerink Partners set forth below is qualified in its entirety by the full text of the written opinion attached hereto as *Annex B*. **Leerink Partners' financial advisory services and opinion were provided for the information and assistance of the Graphite board of directors (in their capacity as directors and not in any other capacity) in connection with and for purposes of the Graphite board of directors' consideration of the merger and the opinion of Leerink Partners addressed only the fairness, from a financial point of view, as of the date thereof, to Graphite of the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement. The opinion of Leerink Partners did not address any other term or aspect of the Merger Agreement or the merger and does not constitute a recommendation to any stockholder of Graphite or LENZ as to whether or how such holder should vote with respect to the merger or otherwise act with respect to the merger or any other matter.**

The full text of the written opinion of Leerink Partners should be read carefully in its entirety for a description of the assumptions made and the qualifications and limitations upon the review undertaken by Leerink Partners in preparing its opinion.

In connection with rendering the opinion described above and performing its related financial analyses, Leerink Partners reviewed, among other things:

- the proposed execution version of the Merger Agreement, as provided to Leerink Partners by Graphite on dated November 14, 2023;
- Graphite's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed by Graphite with the SEC;
- Graphite's Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, as filed by Graphite with the SEC;
- certain Current Reports on Form 8-K, as filed by Graphite with, or furnished by Graphite to, the SEC;
- certain internal information, primarily related to expense forecasts, relating to the business, operations, earnings, cash flow, assets, liabilities and prospects of Graphite, as furnished to Leerink Partners by the management of Graphite; and
- certain internal information relating to the business, operations, earnings, cash flow, assets, liabilities and prospects of LENZ, including the Graphite management risk-adjusted LENZ projections prepared by management of Graphite, as furnished to, and approved for use by, Leerink Partners for purposes of Leerink Partners' analysis, as described above under "*The Merger—Certain Unaudited Prospective Financial Information*," and which are collectively referred to in this summary of the opinion of Leerink Partners as the "Internal Data."

Leerink Partners also conducted discussions with members of the senior management of Graphite and LENZ and their respective advisors and representatives regarding the Internal Data as well as the past and current business, operations, financial condition and prospects of each of Graphite and LENZ. Leerink Partners also conducted such other financial studies and analyses and took into account such other information as Leerink Partners deemed appropriate.

Leerink Partners assumed, without independent verification or any responsibility therefor, the accuracy and completeness of the financial, legal, regulatory, tax, accounting and other information supplied to, discussed with, or reviewed by Leerink Partners for purposes of its opinion and, with Graphite's consent, Leerink Partners

relied upon such information as being complete and accurate. In that regard, Leerink Partners was advised by Graphite, and Leerink Partners assumed, at Graphite's direction, that the Internal Data (including, without limitation, the Graphite management risk-adjusted LENZ projections) were reasonably prepared on bases reflecting the best currently available estimates and judgments of the management of Graphite and LENZ as to the matters covered thereby and Leerink Partners relied, at Graphite's direction, on the Internal Data for purposes of its analysis and its opinion. Leerink Partners expressed no view or opinion as to the Internal Data (including, without limitation, the Graphite management risk-adjusted LENZ projections) or the assumptions on which the Internal Data was based. The Graphite board of directors was aware that the management of Graphite did not provide Leerink Partners with, and Leerink Partners did not otherwise have access to, financial forecasts regarding Graphite's business, other than the expense forecasts described above. Accordingly, Leerink Partners did not perform a discounted cash flow analysis or any multiples-based analysis with respect to Graphite. In addition, at Graphite's direction, Leerink Partners did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent, derivative, off-balance-sheet or otherwise) of Graphite or LENZ, nor was Leerink Partners furnished with any such evaluation or appraisal, and Leerink Partners was not asked to conduct, and did not conduct, a physical inspection of the properties or assets of Graphite or LENZ.

Leerink Partners assumed, at Graphite's direction, that the final executed Merger Agreement would not differ in any respect material to Leerink Partners' analysis or its opinion from the last version of the Merger Agreement reviewed by Leerink Partners. Leerink Partners also assumed, at Graphite's direction, that the representations and warranties made by LENZ and Graphite and Merger Sub in the Merger Agreement were and would continue to be true and correct in all respects material to Leerink Partners' analysis. Furthermore, Leerink Partners assumed, at Graphite's direction, that the merger would be consummated on the terms set forth in the Merger Agreement and in accordance with all applicable laws and other relevant documents or requirements, without delay or the waiver, modification or amendment of any term, condition or agreement, the effect of which would be material to Leerink Partners' analysis or its opinion and that, in the course of obtaining the necessary governmental, regulatory and other approvals, consents, releases and waivers for the merger, no delay, limitation, restriction, condition or other change would be imposed, the effect of which would be material to Leerink Partners' analysis or its opinion. Leerink Partners did not evaluate and did not express any opinion as to the solvency or fair value of Graphite or LENZ, or their respective abilities to pay their obligations when they come due, or as to the impact of the merger on such matters, under any state, federal or other laws relating to bankruptcy, insolvency, or similar matters. Leerink Partners is not a legal, regulatory, tax or accounting advisor, and Leerink Partners expressed no opinion as to any legal, regulatory tax or accounting matters. Leerink Partners expressed no view or opinion as to the price or range of prices at which the shares of stock or other securities or instruments of Graphite or any third party may trade at any time, including subsequent to the announcement or consummation of the merger.

Leerink Partners expressed no view as to, and the opinion of Leerink Partners did not address, Graphite's underlying business decision to proceed with or effect the merger, or the relative merits of the merger as compared to any alternative business strategies or transactions that might be available to Graphite or in which Graphite might engage. The opinion of Leerink Partners was limited to and addressed only the fairness, from a financial point of view, as of the date of the opinion, to Graphite of the exchange ratio proposed to be paid by Graphite pursuant to the terms of the Merger Agreement. Leerink Partners was not asked to, and Leerink Partners did not, express any view on, and Leerink Partners' opinion did not address, any other term or aspect of the Merger Agreement or the transactions contemplated thereby, including, without limitation, the structure or form of the merger, or any other agreements or arrangements contemplated by the Merger Agreement or entered into in connection with or otherwise contemplated by the merger, including, without limitation, the fairness of the merger or any other term or aspect of the merger to, or any consideration to be received in connection therewith by, or the impact of the merger on, the holders of any class of securities, creditors or other constituencies of Graphite, LENZ or any other party. In addition, Leerink Partners expressed no view or opinion as to the fairness (financial or otherwise) of the amount, nature or any other aspect of any compensation to be paid or payable to any of the officers, directors or employees of Graphite, LENZ or any other party, or class of such persons in connection with the merger or the other transactions contemplated by the Merger Agreement, whether relative to

the exchange ratio to be paid by Graphite pursuant to the terms of the Merger Agreement or otherwise. The opinion of Leerink Partners was necessarily based on financial, economic, monetary, currency, market and other conditions and circumstances as in effect on, and the information made available to Leerink Partners as of, the date of its written opinion, and Leerink Partners does not have any obligation or responsibility to update, revise or reaffirm its opinion based on circumstances, developments or events occurring after the date of the opinion. Leerink Partners' opinion does not constitute a recommendation to any stockholder of Graphite or LENZ as to whether or how such stockholder should vote with respect to the merger or otherwise act with respect to the merger or any other matter.

Leerink Partners' financial advisory services and its opinion were provided for the information and assistance of the Graphite board of directors (in their capacity as directors and not in any other capacity) in connection with and for purposes of its consideration of the merger and the other transactions contemplated by the Merger Agreement. Leerink Partners' opinion was approved by the Leerink Partners LLC Fairness Opinion Review Committee.

Summary of Financial Analyses

The following is a summary of the material financial analyses prepared by Leerink Partners and reviewed with the Graphite board of directors in connection with its opinion, which was delivered orally to the Graphite board of directors on November 14, 2023, and subsequently confirmed in its written opinion, dated November 14, 2023. For purposes of the analyses described below, Leerink Partners was directed to rely upon the Internal Data, including the Graphite management risk-adjusted LENZ projections. The summary set forth below does not purport to be a complete description of the financial analyses performed or factors considered by, and underlying the opinion of, Leerink Partners, nor does the order of the analyses described below represent the relative importance or weight given to those analyses by Leerink Partners. The preparation of a fairness opinion is a complex analytical process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances and, therefore, a fairness opinion is not readily susceptible to summary description. In arriving at its opinion, Leerink Partners did not draw, in isolation, conclusions from or with regard to any factor or analysis that it considered. Accordingly, Leerink Partners believes that its analyses must be considered as a whole and that selecting portions of such analyses and factors without considering all analyses and factors, could create a misleading or incomplete view of the processes underlying Leerink Partners' financial analyses and its opinion.

Leerink Partners may have deemed various assumptions more or less probable than other assumptions, so the reference ranges resulting from any particular portion of the analyses summarized below should not be taken to be the view of Leerink Partners as to the actual value of Graphite or LENZ. In its analyses, Leerink Partners made numerous assumptions with respect to industry performance, general business and economic conditions and other matters, many of which are beyond the control of Graphite or any other parties to the merger and the other transactions contemplated by the Merger Agreement. None of Graphite, LENZ, Merger Sub, Leerink Partners or any other person assumes responsibility if future results are materially different from those discussed. Any estimates contained in these analyses are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than as set forth below. In addition, analyses relating to the value of Graphite or LENZ do not purport to be appraisals or reflect the prices at which these companies may actually be sold. Accordingly, the assumptions and estimates used in, and the results derived from, the financial analyses are inherently subject to substantial uncertainty. Except as otherwise noted, the following quantitative information, to the extent that it is based on market data, is based on market data as it existed on or before November 14, 2023, and is not necessarily indicative of current market conditions.

Leerink Partners' financial analyses and opinion were only one of many factors taken into consideration by the Graphite board of directors in its evaluation of the merger, as described under "*The Merger—Graphite's Reasons for the Merger*." Consequently, the analyses described below should not be viewed as determinative of the views of the Graphite board of directors or management of Graphite with respect to the exchange ratio or as to whether the Graphite board of directors would have been willing to determine that a different exchange ratio was fair. The

exchange ratio, as well as the type of consideration payable in the merger, was determined through arm's-length negotiations between Graphite and LENZ and was approved by the Graphite board of directors. Leerink Partners provided advice to Graphite during these negotiations. However, Leerink Partners did not recommend any specific exchange ratio or other financial terms to Graphite or the Graphite board of directors or that any specific exchange ratio or other financial terms constituted the only appropriate consideration for the merger.

In preparing its analysis, Leerink Partners took into account that the exchange ratio contained in the Merger Agreement is calculated by attributing equity values of $126,500,000 and $231,600,000 to Graphite and LENZ, respectively, subject to certain adjustments related to Graphite's net cash set forth in the Merger Agreement, after giving effect to the special cash dividend, and before giving effect to the Graphite private placement of $53.5 million. Leerink Partners expressed no opinion as to any such adjustments. For purposes of its analysis, Leerink Partners utilized the estimated exchange ratio of 1.4135 shares of Graphite common stock for each share of LENZ, based on Graphite's and LENZ's respective capitalization as of November 14, 2023 (calculated using the treasury stock method and fully diluted basis, respectively and before giving effect to the proposed reverse stock split). For additional information, see "*The Merger Agreement—Merger Consideration and Exchange Ratio*."

Discounted Cash Flow Analysis

A discounted cash flow analysis is a traditional valuation methodology used to derive a valuation of an asset or set of assets by calculating the "present value" of estimated future cash flows of the asset or set of assets. "Present value" refers to the current value of future cash flows or amounts and is obtained by discounting those future cash flows or amounts by a discount rate that takes into account assumptions and estimates of risk, the opportunity cost of capital, expected returns and other appropriate factors, and then adding the present value equivalent of the terminal value of the business at the end of the applicable projection period. A discounted cash flow analysis is a widely accepted valuation methodology for development stage biotechnology companies, including valuations of companies whose primary product candidate is still in development and for which regulatory authorization to market the applicable product candidate may not be obtained, if at all, until several years into the future. For purposes of its discounted cash flow analysis, at the direction of Graphite, Leerink Partners relied upon the Graphite management risk-adjusted LENZ projections. Leerink Partners was advised by Graphite, and assumed, at Graphite's direction, that the Graphite management risk-adjusted LENZ projections were reasonably prepared on bases reflecting the best currently available estimates and judgments of the management of Graphite as to the matters covered thereby. The Graphite management risk-adjusted LENZ projections, which Graphite management directed Leerink Partners to use in deriving its financial analyses, include cash flows through 2036, which is the year that Graphite management assumed patent protections for LNZ100 and/or LNZ101 will expire. Graphite advised Leerink Partners that it believed it was reasonable to forecast revenues through the patent life of LNZ100 and/or LNZ101.

Leerink Partners' discounted cash flow analysis calculated the estimated present value of the stand-alone, unlevered, after-tax free cash flows that LENZ was forecasted to generate from January 31, 2024, through December 31, 2036, which unlevered, after-tax free cash flows were derived from the Graphite management risk-adjusted LENZ projections. Leerink Partners estimated the net present value of unlevered, after-tax free cash flows after fiscal year 2036 by assuming an annual decline of 50% of such cash flows in perpetuity. These cash flows were discounted to present value as of January 31, 2024, using a discount rate ranging from 11% to 13%, derived from a weighted average cost of capital calculation for LENZ, which Leerink Partners performed utilizing the capital asset pricing model with inputs that Leerink Partners determined were relevant based on publicly available data and Leerink Partners' professional judgment, including target capital structure, levered and unlevered betas for certain companies deemed by Leerink Partners to be comparable to LENZ, and the equity market risk premium and yields for U.S. treasury bonds, and adjusted for LENZ's estimated net cash balance of $57.3 million as of January 31, 2024, as provided by management of LENZ, in order to derive an implied equity value range for LENZ. This analysis resulted in an implied equity value for LENZ of approximately $460 million to $540 million and a corresponding implied exchange ratio of approximately 2.8075 to 3.2957, i.e., an implied equity value for LENZ that is substantially greater than the implied equity value for LENZ applying the estimated exchange ratio of 1.4135 shares of Graphite common stock utilized by Leerink Partners for purposes of its financial analyses.

General

Leerink Partners is a full-service securities firm engaged in securities trading and brokerage activities as well as investment banking and financial advisory services. Leerink Partners has provided certain investment banking services to Graphite from time to time, for which it has received compensation but no such compensation was received in the past two years. In the ordinary course of business, Leerink Partners may in the future provide investment banking services to Graphite, LENZ or their respective affiliates and would expect to receive customary fees for the rendering of such services. In the ordinary course of its trading and brokerage activities, Leerink Partners has in the past and may in the future hold positions, for its own account or the accounts of its customers, in equity, debt or other securities of Graphite, LENZ or their respective affiliates.

Consistent with applicable legal and regulatory requirements, Leerink Partners has adopted policies and procedures to establish and maintain the independence of its research department and personnel. As a result, Leerink Partners' research analysts may hold views, make statements or investment recommendations and/or publish research reports with respect to Graphite, LENZ and the merger and other participants in the merger that differ from the views of Leerink Partners' investment banking personnel.

Graphite selected Leerink Partners as its financial advisor in connection with the merger based on Leerink Partners' qualifications, reputation, experience and expertise in the biopharmaceutical industry, its knowledge of and involvement in recent transactions in the biopharmaceutical industry and its familiarity with Graphite and its business. Leerink Partners is an internationally recognized investment banking firm that has substantial experience in transactions similar to the merger and the other transactions contemplated by the Merger Agreement.

In connection with Leerink Partners' services as financial advisor to Graphite, Graphite has agreed to pay Leerink Partners an aggregate fee of $3.0 million, $500,000 of which became payable upon the rendering by Leerink Partners of its opinion on November 14, 2023, and the remainder of which is payable contingent upon consummation of the merger. In addition, Graphite has agreed to reimburse certain of Leerink Partners' expenses arising, and to indemnify Leerink Partners against certain liabilities that may arise, out of Leerink Partners' engagement. The terms of the fee arrangement between Leerink Partners and Graphite, which are customary in transactions of this nature, were negotiated at arm's length between Leerink Partners and Graphite, and the Graphite board of directors was aware of the arrangement, including the fact that a significant portion of the fee payable to Leerink Partners is contingent upon the completion of the merger and the other transactions contemplated by the Merger Agreement.

Interests of Graphite's Directors and Executive Officers in the Merger

In considering the recommendation of the Graphite board of directors with respect to issuing shares of Graphite common stock in the merger and other matters to be acted upon by the Graphite stockholders at the Graphite special meeting, the Graphite stockholders should be aware that Graphite's directors and executive officers have interests in the merger that are different from, or in addition to, the interests of the Graphite stockholders generally. These interests include the following:

- Certain of Graphite's directors are expected to become directors of the combined company after the effective time, and following the closing, will be compensated as a non-employee director of the combined company pursuant to a new non-employee director compensation policy that is expected to be adopted in connection with the closing;
- Under the Merger Agreement, Graphite's directors and executive officers are entitled to continued indemnification, expense advancement and insurance coverage;
- In connection with the merger, all outstanding equity awards held by Graphite's directors should be fully vested;
- In connection with the merger, (i) prior to giving effect to the cash dividend and the reverse stock split, the vesting of each outstanding and unexercised Graphite option with a per share exercise price equal to or greater than $3.00 shall be fully vested, and each such option not exercised as of immediately

prior to the effective time shall be cancelled at the effective time for no consideration and (ii) each Graphite option that has an exercise price per share less than $3.00 and is unexpired and unexercised as of the effective time, shall continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite options immediately prior to the effective time, subject to adjustment with respect to the special cash dividend and reverse stock split; and

- Each of Graphite's executive officers are parties to either, or a combination of, an employment agreement, separation agreement, and/or retention agreement that provide for severance benefits, including accelerated vesting of outstanding equity awards and certain cash payments, in connection with the merger.

The Graphite board of directors was aware of these potential conflicts of interests and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the merger, and to recommend that the Graphite stockholders approve the proposals to be presented to the Graphite stockholders for recommendation at the Graphite special meeting as contemplated by this proxy statement/prospectus.

Ownership Interests

As of February 1, 2024, Graphite's current non-employee directors and executive officers beneficially owned, in the aggregate, approximately 3,860,386 of the shares of Graphite common stock, which for purposes of this subsection excludes any Graphite shares issuable upon exercise or settlement of Graphite options held by such individuals. The affirmative vote of a majority of votes properly cast for and against by the holders of Graphite common stock at the Graphite special meeting, assuming a quorum is present, is required for approval of the Graphite Stockholder Proposals. As of February 1, 2024, certain Graphite stockholders who, in the aggregate, owned approximately 29,935,240 shares of the outstanding shares of Graphite common stock have entered into the Support Agreements in connection with the merger. For a more detailed discussion of the Support Agreements, please see the section titled "*Agreements Related to the Merger—Support Agreements*" beginning on page 224 of this proxy statement/prospectus.

Certain Graphite stockholders affiliated with Graphite's directors also currently hold shares of Graphite common stock. The table below sets forth the ownership of Graphite common stock by affiliates of Graphite's directors as of February 1, 2024.

Stockholder	Number of Shares of Graphite common stock Held
Entities Affiliated with Versant Ventures[1]	16,416,117
Entities Affiliated with Samsara BioCapital[2]	8,497,067

(1) Based on Amendment No. 1 to Schedule 13D filed on November 17, 2023. Consists of (i) 14,708,398 shares of common stock held by Versant Venture Capital VI, L.P. ("Versant VI") and (ii) 1,707,719 shares of common stock held by Versant Vantage II, L.P. ("Versant Vantage II", and together with Versant VI, the "Versant Funds"). Versant Ventures VI GP, L.P. is the sole general partner of Versant VI, and Versant Ventures VI LLC is the sole general partner of Versant Ventures VI GP, L.P. and has voting and dispositive control over the shares held by Versant VI. Each of Bradley J. Bolzon, Jerel C. Davis, Ph.D., Kirk G. Nielsen, Clare Ozawa, Robin L. Praeger, and Thomas Woiwode Ph.D., are the managing directors of Versant Ventures VI LLC, may be deemed to possess voting and dispositive control over the shares held by Versant VI and may be deemed to have indirect beneficial ownership of the shares held by Versant VI but disclaims beneficial ownership of such securities, except to the extent of their respective pecuniary interest therein, if any. Versant Vantage II GP, L.P. is the sole general partner of Versant Vantage II and Versant Vantage II LLC is the sole general partner of Versant Vantage II GP, L.P. and has voting and dispositive control over the shares held by Versant Vantage II. Each of Bradley J. Bolzon, Jerel C. Davis, Ph.D., Alexander Mayweg, Clare Ozawa, Robin L. Praeger, and Thomas Woiwode Ph.D., are the managing directors of Versant Vantage II LLC, may be deemed to possess voting and dispositive control over the shares held by Versant Vantage II and may be deemed to have indirect beneficial ownership of the shares held by Versant Vantage II but disclaims beneficial ownership of such securities, except to the extent of their respective pecuniary interest therein, if any. Dr. Davis is a member of the Graphite board of directors. The address for the Versant Funds is One Sansome Street, Suite 3630, San Francisco, CA 94104.

(2) Based on a Schedule 13G/A filed on February 14, 2023. Consists of (i) 8,459,314 shares of common stock held by Samsara BioCapital, L.P. ("Samsara LP") and (ii) 37,753 shares of common stock held by 436, L.P. The general partner of Samsara LP is Samsara BioCapital

GP, LLC, ("Samsara LLC"). The general partner of 436, L.P. is 436, LLC. Voting and dispositive decisions with respect to the shares held by Samsara LP and 436, L.P. are made by Dr. Srinivas Akkaraju, MD, Ph.D., a manager of Samsara GP LLC and 436, LLC, and, accordingly, Dr. Akkaraju may be deemed to beneficially own the shares held by Samsara LP. And 436, L.P. The address of the principal business and office of Samsara LP and 436, L.P. is 628 Middlefield Road, Palo Alto, CA 94301.

Versant Ventures is affiliated with Dr. Davis and Dr. Rizzuto, who are members of the Graphite board of directors, and Dr. Ozawa, a member of the LENZ board of directors. As of February 1, 2024, Versant Ventures beneficially owned 28.2% and 16.9% of the outstanding Graphite common stock and LENZ capital stock, respectively. In light of Versant's relationships with Graphite and LENZ and to avoid any potential conflicts of interest, Dr. Davis and Dr. Rizzuto recused themselves from certain discussions of the Graphite board of directors and Transaction Committee (as applicable) and decisions to approve a strategic transaction with Lenz, as further discussed in the section titled "*The Merger—Background of the Transaction*" and Dr. Ozawa recused herself from discussions of the LENZ board of directors with respect to the proposed transaction with Graphite.

Treatment of Graphite Options

Graphite's directors and executive officers hold Graphite options which, pursuant to the Merger Agreement, will be treated as set forth in the section titled "*The Merger Agreement—Treatment of Graphite Common Stock and Graphite Options*" on page 207 of this proxy statement/prospectus.

The table below sets forth information with respect to the Graphite options held by each person who is or has been during the period beginning on January 1, 2023 through February 1, 2024, an executive officer or non-employee director of Graphite, without giving effect to any vesting acceleration provided for in an employment agreement, separation agreement, retention agreement, non-employee director compensation policy and/or the Merger Agreement. The number of shares of Graphite common stock underlying such Graphite options and the applicable exercise prices of such Graphite options will be adjusted appropriately in accordance with the terms of Graphite's 2020 Plan and 2021 Plan, as applicable, to reflect the proposed special cash dividend and reverse stock split. Depending on when the effective time occurs, certain options shown in the table may vest in accordance with their terms prior to the effective time.

Name	Number of Vested Graphite Options Held (#)	Weighted Average Exercise Price of Vested Graphite Options ($)	Number of Unvested Graphite Options Held (#)	Weighted Average Exercise Price of Unvested Graphite Options ($)
Executive Officers				
Josh Lehrer[1]	2,834,631	$ 3.67	704,907	$ 7.25
Alethia Young[2]	219,375	$ 3.70	—	$ —
Kim Drapkin[3]	8,888	$ 2.52	31,112	$ 2.52
Non-Employee Directors[4]				
Perry Karsen	248,140	$ 0.80	41,260	$ 2.13
Abraham Bassan	56,666	$ 11.89	23,334	$ 4.76
Jerel Davis, Ph.D.	56,666	$ 11.89	23,334	$ 4.76
Kristen M. Hege, M.D.	90,188	$ 6.18	43,397	$ 5.15
Joseph Jimenez	175,717	$ 0.86	30,567	$ 2.47
Matthew Porteus, M.D., Ph.D.	20,000	$ 2.54	20,000	$ 2.72
Carlo Rizzuto, Ph.D.	56,666	$ 11.89	23,334	$ 4.76
Smital Shah	90,188	$ 6.18	43,397	$ 5.15
Jo Viney, Ph.D.	92,138	$ 6.21	41,447	$ 5.05

(1) Dr. Lehrer separated his employment from Graphite as of August 21, 2023, but continues to serve as a consultant to Graphite. He received no cash compensation for services as a consultant. During his post-employment consulting period, Dr. Lehrer's outstanding equity awards will continue to vest in accordance with their existing terms; provided, that in the event the consummation of the merger occurs prior February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to

Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024, had Dr. Lehrer's service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder). As of February 1, 2024, such number of unvested shares is 172,791, with a weighted average exercise price of $6.76.

(2) Ms. Young resigned from Graphite, effective June 30, 2023. In connection with her termination of employment, fifty percent (50%) of Ms. Young's outstanding options granted in 2023 that were unvested as of the date of her termination were immediately vested. Any options that remained unvested after giving effect to the foregoing accelerated vesting were then immediately forfeited.

(3) Ms. Drapkin will receive full accelerated vesting of any unvested Graphite options that she received as a director upon the consummation of the merger, pursuant to Graphite's non-employee director compensation policy (as discussed under the *Director Compensation* section).

(4) Each director will receive full acceleration of vesting of any unvested Graphite options upon the consummation of the merger pursuant to Graphite's non-employee director compensation policy (as discussed under the *Director Compensation* section).

Treatment of Graphite Common Stock

Graphite's directors and executive officers hold Graphite restricted shares of common stock which, pursuant to the Merger Agreement, will be treated as set forth in the section titled "*The Merger Agreement—Treatment of Graphite Common Stock and Graphite Options*" on page 207 of this proxy statement/prospectus.

The table below sets forth information with respect to the Graphite shares of common stock held by each person who is or has been during the period beginning on January 1, 2023 through February 1, 2024, an executive officer or non-employee director of Graphite, without giving effect to any vesting acceleration provided for in an employment agreement, separation agreement, retention agreement, non-employee director compensation policy and/or the Merger Agreement. The number of restricted shares of Graphite common stock will be adjusted appropriately in accordance with the terms of Graphite's 2020 Plan and 2021 Plan, as applicable, to reflect the proposed special cash dividend and reverse stock split. Depending on when the effective time occurs, certain restricted shares shown in the table may vest in accordance with their terms prior to the effective time.

Name	Number of Unvested Graphite Shares Held (#)	Estimated Value of Unvested Graphite Shares ($)(1)
Executive Officers		
Josh Lehrer(2)	72,097	$ 165,895.20
Alethia Young(3)	—	$ —
Kim Drapkin(4)	—	$ —
Non-Employee Directors		
Perry Karsen(5)	18,407	$ 42,354.51
Abraham Bassan(6)	—	$ —
Jerel Davis, Ph.D.(6)	—	$ —
Kristen M. Hege, M.D.(6)	—	$ —
Joseph Jimenez(5)	13,858	$ 31,887.26
Matthew Porteus, M.D., Ph.D.(7)	363,725	$ 836,931.23
Carlo Rizzuto, Ph.D.(6)	—	$ —
Smital Shah(6)	—	$ —
Jo Viney, Ph.D.(6)	—	$ —

(1) The Estimated Value of Unvested Graphite Shares depicted above represents the product of (i) $2.301, which is the average closing trading price of Graphite common stock over the first five business days following the first public announcement of the transactions contemplated by the Merger Agreement on November 15, 2023 and (ii) the number of shares underlying the Graphite restricted shares as of February 1, 2024.

(2) Dr. Lehrer separated his employment from Graphite as of August 21, 2023, but continues to serve as a consultant to Graphite. He received no cash compensation for services as a consultant. During his post-employment consulting period, Dr. Lehrer's outstanding equity awards will continue to vest in accordance with their existing terms; provided, that in the event the consummation the merger occurs prior February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024, had Dr. Lehrer's service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder). As of February 1, 2024, such number of shares is 47,698, with a value of $109,753.10.

(3) Ms. Young did not hold any restricted stock.
(4) Ms. Drapkin does not hold any restricted stock.
(5) Each director will receive accelerated vesting of any unvested shares of Graphite common stock upon a change of control of Graphite, including the consummation of the merger, pursuant to their applicable early exercisable non-qualified stock option award agreements; provided that each director must continue to provide services to Graphite as of the consummation of the merger.
(6) Mr. Bassan, Ms. Shah, and Drs. Davis, Hege, Rizzuto and Viney do not hold any restricted stock.
(7) Dr. Porteus' restricted shares will fully vest upon a change in control (including the merger), subject to his continuous service with Graphite until the change in control.

Graphite 2021 Employee Stock Purchase Plan

Graphite sponsors its 2021 Employee Stock Purchase Plan, which is referred to as the 2021 ESPP, in which executive officers and other employees are eligible to participate. In connection with the merger, the Graphite board of directors adopted resolutions to provide that no offering periods or purchase periods under the 2021 ESPP will begin following the date of the Merger Agreement. In addition, the 2021 ESPP will terminate in connection with the merger.

Director Positions Following the Merger

The Graphite board of directors currently consists of ten members. In accordance with the terms of the Graphite charter and the Graphite bylaws, the Graphite board of directors is divided into three classes, Class I, Class II and Class III, with members of each class serving staggered three-year terms. The members of the classes are divided as follows:

- the Class I directors are Jerel Davis, Ph.D., Perry Karsen and Joseph Jimenez, and their terms will expire at the annual meeting of stockholders to be held in 2025;
- the Class II directors are Abraham Bassan, Matthew Porteus, M.D., Ph.D. and Jo Viney, Ph.D., and their terms will expire at the annual meeting of stockholders to be held in 2026; and
- the Class III directors are Kristen M. Hege, M.D., Kimberlee C. Drapkin, Carlo Rizzuto, Ph.D. and Smital Shah, and their terms will expire at the annual meeting of stockholders to be held in 2024.

Following the merger, the combined company's board of directors will consist of seven members, consisting of two members designated by Graphite and five members designated by LENZ.

There are no family relationships among the current Graphite directors and executive officers, and there are no family relationships among any of the proposed combined company director and officers.

Indemnification and Insurance

For a discussion of the indemnification and insurance provisions related to Graphite's directors and executive officers under the Merger Agreement, see the section titled "*The Merger Agreement—Indemnification and Insurance for Directors and Officers*" beginning on page 216 of this proxy statement/prospectus.

Director Compensation

Under Graphite's non-employee director compensation policy, Graphite pays its non-employee directors cash retainers for service on the Graphite board of directors and for service on each committee on which the director is a member. The chairperson of each committee receives a higher retainer for such service. These fees are payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment is prorated for any portion of such quarter that the director is not serving on the Graphite board of directors.

In addition, the Graphite non-employee director compensation policy provides that, upon initial election or appointment to the Graphite board of directors, each new non-employee director will be granted a one-time grant of a non-statutory stock option to purchase 40,000 shares of Graphite common stock on the date of such director's election or appointment to the Graphite board of directors, or the Director Initial Grant. The Director Initial Grant vests in substantially equal monthly installments over three years, subject to the non-employee director's continued services to Graphite. On the date of each annual meeting of stockholders of Graphite, each non-employee director who will continue as a non-employee director following such meeting will be granted an annual award of a non-statutory stock option to purchase 20,000 shares of common stock, or the Director Annual Grant. The Director Annual Grant vests in full on the earlier of the one-year anniversary of the grant date or on the date of Graphite's next annual meeting of stockholders, subject to the non-employee director's continued services to Graphite. If a new non-employee director joins the Graphite board of directors on a date other than the date of Graphite's annual meeting of stockholders, then in lieu of the Director Annual Grant above, such non-employee director will be granted a pro-rata portion of the Director Annual Grant at the next annual meeting of stockholders based on the time between such non-employee director's appointment and such next annual meeting of stockholders. The Director Initial Grant and Director Annual Grant are subject to full accelerated vesting upon a "sale event" (as defined in the 2021 Plan) of Graphite, which includes the merger.

The aggregate amount of compensation, both equity compensation and cash compensation, paid to any non-employee director for service as a non-employee director in a calendar year period will not exceed $1,000,000 in the first calendar year such individual becomes a non-employee director and $750,000 in any other calendar year.

Graphite also reimburses all reasonable out-of-pocket expenses incurred by directors for their attendance at meetings of the Graphite board of directors or any committee thereof. Graphite employee directors receive no additional compensation for their service as a director.

Executive Employment, Retention and Severance Arrangements

Josh Lehrer, M.D.

On March 21, 2023, Graphite entered into a retention agreement with Dr. Lehrer (the "Lehrer Retention Agreement"), which provided for a lump sum cash payment equal to 50% of Dr. Lehrer's then-current annualized base salary, payable upon the earliest of (A) a termination by Graphite other than for "cause," as defined in the Lehrer Retention Agreement, death or disability, (B) a resignation for "good reason," as defined in the Lehrer Retention Agreement, and (C) February 22, 2024, provided that clauses (A) and (B) above shall be subject to the execution and delivery of an effective release of claims in favor of Graphite. In addition, the Lehrer Retention Agreement provided for (i) the full acceleration of vesting of 50% of any outstanding and unvested equity awards granted in 2023 to Dr. Lehrer in the event he is terminated by Graphite other than for cause or due to death or disability, or if he resigns from Graphite after June 30, 2023, and (ii) an extension of the exercise period for all stock options held by Dr. Lehrer at the time his employment is terminated until the earlier of (i) 12 months following such termination and (ii) the applicable expiration date of the stock option.

On September 7, 2023, Graphite and Dr. Lehrer entered into a separation and release agreement (the "Lehrer Separation Agreement"), pursuant to which Dr. Lehrer is entitled to, in addition to the retention entitlements included in the Lehrer Retention Agreement, (i) a separation payment in the amount of $47,666.67 per month for a period of twelve (12) months and (ii) COBRA continuation coverage for twelve (12) months following August 21, 2023, the Termination Date, or until he has commenced other employment and is eligible for healthcare coverage under the new employer's plan, whichever comes first.

Pursuant to the Lehrer Separation Agreement, Dr. Lehrer will continue to serve as a consultant to Graphite until the earlier of (i) twelve (12) months from the Termination Date or (ii) the date of completion of a Strategic Transaction (as defined in the Lehrer Separation Agreement and which includes the merger) (the "Post-Employment Consulting Period"). During the Post-Employment Consulting Period, Dr. Lehrer's outstanding

equity awards in Graphite will continue to vest in accordance with their existing terms as in effect as of the Termination Date; provided, that in the event the Post-Employment Consulting Period ends upon the consummation of a Strategic Transaction prior to February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024 had his service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder).

Alethia Young

Ms. Young previously resigned from Graphite, effective June 30, 2023. Although she did not enter into a separation agreement with the Company upon her resignation, fifty percent (50%) of the outstanding and unvested options granted in 2023 held by Ms. Young as of the date of her termination were immediately vested, and the post-termination exercise period for such options was extended from three (3) months to twelve (12) months.

Kimberlee Drapkin

Graphite entered into a letter agreement, dated August 21, 2023 (the "Start Date"), with Ms. Drapkin (the "Drapkin Letter"). Pursuant to the terms of the Drapkin Letter, Ms. Drapkin will be entitled to a base salary of $550,000 per year. In addition, Ms. Drapkin will be entitled to cash severance payments in the amount of (i) $400,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the closing of a Strategic Transaction (as defined in the Drapkin Letter and which includes the merger), plus an additional $200,000 if the definitive agreement for such Strategic Transaction is executed within three (3) months after the Start Date or (ii) $350,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the Graphite board of directors' approval of a plan of dissolution of Graphite under Delaware law, in each case subject to Ms. Drapkin's execution and non-revocation of a separation agreement and release, as further provided in the Drapkin Letter.

In addition, in connection with Ms. Drapkin's appointment as a member of the Graphite board of directors on July 28, 2023, pursuant to Graphite's non-employee director compensation policy, Ms. Drapkin received an initial equity grant in the amount of 40,000 shares of Graphite common stock, which vests in substantial equal monthly installments over a period of three years, subject to Ms. Drapkin's continued services to Graphite. Such initial grant is subject to full accelerated vesting upon a sale of Graphite, including the Merger. Ms. Drapkin did not receive cash compensation in exchange for her services as a director.

The table below summarizes the potential cash benefits for each of Graphite's executive officers in connection with the consummation of the merger.

Executive	Cash Transaction Bonus	Cash Severance
Josh Lehrer, M.D.(1)	$ 0	$ 0
Alethia Young(2)	$ 0	$ 0
Kimberlee Drapkin(3)	$ 200,000	$ 400,000

(1) Dr. Lehrer separated from Graphite as of August 21, 2023 and was not entitled to compensatory cash payments in connection with the merger.
(2) Ms. Young resigned from Graphite, effective June 30, 2023, and was not entitled to receive any cash benefits in connection with the merger.
(3) In connection with the merger, Ms. Drapkin may be entitled to cash severance and a cash transaction bonus in accordance to the Drapkin Letter.

Limitations of Liability and Indemnification

The Graphite charter contains provisions that limit the liability of its directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, Graphite's directors will not be personally liable to Graphite or its stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to Graphite or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which they derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal. If the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of Graphite's directors will be further limited to the greatest extent permitted by the DGCL.

In addition, Graphite adopted bylaws which provide that Graphite will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or similar proceeding, and any claim, issue, or matter therein, by reason of the fact that he or she is or was one of Graphite's directors or officers or is or was serving at Graphite's request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Graphite's bylaws provide that Graphite may indemnify, in the discretion of the Graphite board of directors, to the fullest extent permitted by law, any employee or agent of Graphite who is or was a party or is threatened to be made a party to any action, suit or similar proceeding, and any claim, issue or matter therein by reason of the fact that he or she is or was one of Graphite's employees or agents or is or was serving at Graphite's request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Graphite's bylaws also provide that Graphite must advance expenses incurred by or on behalf of a director, and may advance expenses by or on behalf of an officer, employee or agent in the discretion of the Graphite board of directors, in advance of the final disposition of any action or proceeding, subject to very limited exceptions.

Graphite has entered into and in the future plan to enter into agreements to indemnify its directors and executive officers. These agreements, among other things, require Graphite to indemnify these individuals for certain expenses (including reasonable attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including indemnification for certain expenses related to any action by or in Graphite's right, on account of any services undertaken by such person on behalf of Graphite or that person's status as a member of the Graphite board of directors to the maximum extent allowed under Delaware law.

Other Interests of Graphite Directors

Dr. Davis is a managing director at Versant Ventures and Dr. Rizzuto is a managing director at Versant Ventures, and funds affiliated with Versant Ventures are investors in Graphite and LENZ.

Interests of LENZ's Directors and Executive Officers in the Merger

In considering the recommendation of the LENZ board of directors with respect to approving the merger, stockholders should be aware that LENZ's directors and executive officers have interests in the merger that are different from, or in addition to, the interests of LENZ stockholders generally. These interests may present them with actual or potential conflicts of interest, and these interests, to the extent material, are described below.

The board of directors of LENZ was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the merger, and to recommend that LENZ stockholders approve the merger as contemplated by this proxy statement/prospectus.

Ownership Interests

As of February 1, 2024, LENZ's current non-employee directors and executive officers, together with their affiliated entities, beneficially owned, in the aggregate approximately 71% of the outstanding shares of LENZ capital stock, which for purposes of this subsection excludes any LENZ shares issuable upon exercise or settlement of LENZ options or Series A Warrants held by such individual or entity. Each of LENZ's officers, directors and affiliated stockholders have also entered into the Support Agreement in connection with the merger. For a more detailed discussion of the support agreements, please see the section titled "*Agreements Related to the Merger—Support Agreements*" beginning on page 224 of this proxy statement/prospectus.

Certain affiliates of LENZ's directors also currently hold shares of LENZ capital stock. The table below sets forth the ownership of LENZ capital stock by affiliates of LENZ's directors as of February 1, 2024.

Stockholder	Number of Shares Beneficially Owned
Alpha Wave Ventures II, LP (1)	13,422,368
Entities affiliated with RA Capital Management (2)	16,079,899
Entities affiliated with Sectoral Asset Management (3)	3,355,591
Entities affiliated with Versant Management (4)	11,214,290

(1) Consists of 13,422,368 shares of LENZ common stock held by Alpha Wave Ventures II, LP. Alpha Wave Ventures GP, Ltd is the general partner of Alpha Wave Ventures II, LP and therefore may be deemed to have beneficial ownership over these shares. The address of Alpha Wave Ventures GP, Ltd is 667 Madison Ave, 19th Floor, New York, New York 10065.

(2) Consists of (i) 11,801,699 shares of LENZ common stock held by RA Capital Healthcare Fund, L.P. ("RACHF"), (ii) 3,114,668 shares of LENZ common stock held by RA Capital Nexus Fund II, L.P. ("Nexus II"), (iii) 814,695 shares of LENZ common stock held by a separately managed account (the "Account", and together with RACHF and Nexus II, the "RA Funds"), (iv) 269,945 shares subject to warrants to purchase shares of LENZ's Series A convertible preferred stock (the "Series A Warrants") held by RACHF, (v) 52,326 shares of LENZ common stock subject to Series A Warrants held by Nexus II, and (vi) 26,566 shares subject to Series A Warrants held by the Account. RA Capital Management, L.P. is the investment manager for the RA Funds. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky, Ph.D. and Rajeev Shah are the managing members. Each of RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by the RA Funds. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such securities, except to the extent of any pecuniary interest therein. The principal business address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(3) Consists of (i) 3,187,812 shares of LENZ common stock held by New Emerging Medical Opportunities Fund V SCSp ("NEMO V") and (ii) 167,779 shares of LENZ common stock held by Sectoral DC 9 Limited ("Sectoral DC"). Sectoral Asset Management Inc. ("Sectoral"), is the manager of NEMO V and Sectoral DC and may be deemed to have indirect beneficial ownership of the shares held by NEMO V and Sectoral DC but disclaims beneficial ownership of such securities, except to the extent of their respective pecuniary interest therein, if any. Dr. Stefan Larson, a member of the LENZ board of directors, is a partner of Sectoral DC. The business address of each of NEMO V, Sectoral DC, Sectoral and Dr. Larson is Sectoral Asset Management, 1010 Sherbrooke St. West, Suite 1610, Montreal, Quebec, Canada H3A 2R7.

(4) Consists of (i) 2,958,477 shares of LENZ common stock held by Versant Vantage II, L.P. ("Versant Vantage II"), (ii) 7,906,976 shares of LENZ common stock held by Versant Venture Capital VII, L.P. ("Versant VII"), and (iii) 348,837 shares of LENZ common stock subject to Series A Warrants held by Versant VII. Versant VII and Versant Vantage II are collectively referred to as the Versant Entities. Versant Vantage II GP-GP, LLC ("Versant Vantage II GP-GP") is the general partner of Versant Vantage II GP, L.P. ("Versant Vantage II GP"), which is the general partner of Versant Vantage II. Each of Versant Vantage II GP and Versant Vantage II GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage II. Versant Ventures VII GP-GP, LLC ("Versant Ventures VII GP-GP") is the general partner of Versant Ventures VII GP, L.P. ("Versant Ventures VII GP"), which is the general partner of Versant VII. Each of Versant Ventures VII GP and Versant Ventures VII GP-GP share voting and dispositive power with respect to the securities held by Versant VII. The address for each of the Versant Entities and individuals is One Sansome Street, Suite 1650, San Francisco, CA 94104.

Versant Ventures is affiliated with Dr. Davis and Dr. Rizzuto, who are members of the Graphite board of directors, and Dr. Ozawa, a member of the LENZ board of directors. As of February 1, 2024, Versant Ventures beneficially owned 28.2% and 16.9% of the outstanding Graphite common stock and LENZ capital stock, respectively. In light of Versant's relationships with Graphite and LENZ and to avoid any potential conflicts of interest, Dr. Davis and Dr. Rizzuto recused themselves from certain discussions of the Graphite board of directors and Transaction Committee (as applicable) and decisions to approve a strategic transaction with Lenz, as further discussed in the section titled "*The Merger—Background of the Transaction*" and Dr. Ozawa recused herself from discussions of the LENZ board of directors with respect to the proposed transaction with Graphite.

Graphite Private Placement

On November 14, 2023, Graphite entered into the Subscription Agreement with the PIPE investors, consisting of certain existing LENZ stockholders and new investors. Pursuant to the Subscription Agreement, and subject to the terms and conditions of such agreement, Graphite agreed to sell, and the PIPE investors agreed to purchase, shares of its common stock for an aggregate purchase price of $53.5 million, which amount may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE investors. The PIPE investors include funds affiliated with RA Capital, Alpha Wave Ventures II, LP, Sectoral Asset Management Inc., and the McCollum Living Trust, which will invest $15 million, $13.5 million, $5 million and $250,000, respectively, in the Graphite private placement. Zach Scheiner, Ph.D., who serves as a principal of RA Capital Management, L.P., Chris Dimitropoulos, who serves as Managing Director, Biotechnology Investments at Alpha Wave Global, L.P., Stefan Larson, Ph.D., who serves as a partner of Sectoral Asset Management, and James McCollum, who is the trustee of the McCollum Living Trust, all serve as directors of LENZ.

Treatment of LENZ Restricted Shares

Under the terms of the Merger Agreement, at the effective time, each award of restricted shares of LENZ common stock that is unvested and outstanding immediately prior to the effective time, will be converted into a number of shares of Graphite common stock equal to the product of (A) the number of shares of LENZ restricted shares, multiplied by (B) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Graphite common stock. The Graphite common stock so converted will remain subject to the terms and conditions (including, without limitation, vesting and repurchase provisions) of such LENZ restricted shares as of immediately prior to the effective time. The table below sets forth information regarding the LENZ restricted shares, as of February 1, 2024, held by each of LENZ's current executive officers and non-employee directors. The number of shares of LENZ restricted shares will be adjusted appropriately to reflect the exchange ratio.

Name	Number of Restricted Shares	Market Value of Restricted Shares
Executive Officer		
Evert Schimmelpennink[1]	—	—
Shawn Olsson[1]	—	—
Marc Odrich[2]	156,751	$ 299,395
Non-Employee Directors		
Chris Dimitropoulos[1]	—	—
Frederic Guerard[1]	—	—
Stefan Larson[1]	—	—
James McCollum[1]	—	—
Clare Ozawa[1]	—	—
Zach Scheiner[1]	—	—
Shelley Thunen[1]	—	—

(1) Messrs. Schimmelpennink, Olsson, Dimitropoulos, Guerard, Larson, McCollum, and Scheiner and Mses. Ozawa and Thunen do not hold any restricted stock.
(2) This amount reflects the fair market value of the LENZ common stock of $1.91 as of February 1, 2024, 2023 (based on the determination of the fair market value by the LENZ board of directors as of the most proximate date) multiplied by the amount shown in the column for the number of restricted shares.

Treatment of LENZ Options

Under the terms of the Merger Agreement, each LENZ option that is outstanding and unexercised immediately prior to the effective time, whether or not vested, will be assumed and converted into a Graphite option. The table below sets forth information regarding the LENZ options held, as of February 1, 2024, by each of LENZ's current executive officers and non-employee directors. The number of shares of LENZ common stock underlying such LENZ options will be adjusted appropriately to reflect the exchange ratio.

Name	Number of Vested Options Held	Weighted Average Exercise Price of Vested Options	Number of Unvested Options Held	Weighted Average Exercise Price of Unvested Options
Executive Officers				
Evert Schimmelpennink	1,645,872	$ 0.35	2,239,851	$ 0.96
Shawn Olsson	334,706	$ 0.61	403,948	$ 0.99
Marc Odrich	—	$ —	328,748	$ 1.22
Non-Employee Directors				
Chris Dimitropoulos	—	—	—	$ —
Frederic Guerard	89,136	$ 0.42	180,247	$ 0.94
Stefan Larson	—	$ —	—	$ —
James McCollum	—	—	—	$ —
Clare Ozawa	—	$ —	—	$ —
Zach Scheiner	—	$ —	—	$ —
Shelley Thunen	—	$ —	—	$ —

Treatment of LENZ Warrants

Under the terms of the Merger Agreement, each warrant to purchase shares of LENZ capital stock that is outstanding and unexercised immediately prior to the effective time will be converted into a warrant to purchase shares of Graphite common stock. The table below sets forth information regarding the warrants to purchase shares of LENZ capital stock held as of February 1, 2024, 2023 by each of LENZ's current executive officers and non-employee directors. The number of shares of LENZ capital stock underlying such warrants will be adjusted appropriately to reflect the exchange ratio.

Name	Number of Warrants Held	Weighted Average Exercise Price of Warrants
Executive Officers		
Evert Schimmelpennink	—	$ —
Shawn Olsson	—	$ —
Marc Odrich	—	$ —
Non-Employee Directors		
Chris Dimitropoulos	—	$ —
Frederic Guerard	—	$ —
Stefan Larson	—	$ —
James McCollum(1)	32,521	$ 2.15
Clare Ozawa	348,837	$ 2.15
Zach Scheiner(2)	348,837	$ 2.15
Shelly Thunen	—	—

(1) The shares are subject to Series A Warrants held by the McCollum Living Trust. James McCollum is the trustee of the McCollum Living Trust.
(2) Consists of (i) 269,945 shares subject to Series A Warrants held by RA Capital Healthcare Fund, L.P., (ii) 52,326 shares subject to Series A Warrants held by RA Capital Nexus Fund II, L.P., and (iii) 26,566 shares subject to Series A Warrants held by a separately managed account.

Management Following the Merger

As described in the section captioned "*Management Following the Merger*" beginning on page 380 of this proxy statement/prospectus, certain of LENZ's directors and executive officers are expected to become the directors and executive officers of the combined company upon the closing.

Compensation Committee Interlocks and Insider Participation

In connection with the closing, the combined company's board of directors is expected to select members of the compensation committee. Each member of the compensation committee is expected to be a "non-employee" director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act and independent within the meaning of the independent director guidelines of Nasdaq. None of the proposed combined company's executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers who is proposed to serve on the combined company's board of directors or compensation committee following the completion of the merger.

Non-Employee Director Compensation and Outside Director Compensation Policy

Prior to the merger, LENZ has not implemented a formal policy with respect to compensation payable to its non-employee directors and none of its non-employee directors received any compensation for service on the LENZ board of directors during 2023. LENZ reimburses its directors for expenses associated with attending meetings of the board of directors and its committees.

Following completion of the merger, it is expected that the combined company will provide compensation to non-employee directors pursuant to a new non-employee director compensation policy that is expected to be adopted in connection with the closing and take effect at the effective time (the "Director Compensation Policy").

Under the Director Compensation Policy, each non-employee director will receive the cash and equity compensation for board services described below. The combined company will also reimburse non-employee directors for reasonable, customary, and documented travel expenses to board or committee meetings.

The Director Compensation Policy will include a maximum annual limit of $750,000 of cash retainers or fees and the Value (as defined below) of equity awards that may be paid, issued, or granted to a non-employee director in any fiscal year, increased to $1,000,000 in the first year an individual becomes a non-employee director. Any cash compensation paid, or equity awards granted to a person for their services as an employee, or for their services as a consultant (other than as a non-employee director), or prior to the effective date of the non-employee Director Compensation Policy will not count for purposes of the limitation. The maximum limit does not reflect the intended size of any potential compensation or equity awards to the combined company's non-employee directors.

Cash compensation

Under the Director Compensation Policy, each non-employee director will receive a cash retainer fee of $40,000 per year. Additionally, each non-employee director that serves as the chair of or as a member of a committee, or as the non-executive chair of the board, will be entitled to receive the following cash compensation for their services under the Director Compensation Policy:

- $30,000 per year for service as non-executive chair;
- $15,000 per year for service as chair of the audit committee;
- $7,500 per year for service as a member of the audit committee;
- $12,000 per year for service as chair of the compensation committee;
- $6,000 per year for service as a member of the compensation committee;
- $10,000 per year for service as chair of the nominating and corporate governance committee; and
- $5,000 per year for service as a member of the nominating and corporate governance committee.

Each non-employee director who serves as the chair of a committee will receive only the additional annual fee as the chair of the committee and not the annual fee as a member of the committee while serving as such chair. A non-employee director who serves as the non-executive chair of the board will receive the annual fee as a non-employee director and the additional annual fee as the non-executive chair. All cash payments to outside directors are paid quarterly in arrears on a pro-rated basis.

Equity Compensation

Non-employee directors will be entitled to receive all types of equity awards other than incentive stock options under the 2024 Plan, including discretionary awards not covered under the Director Compensation Policy. Following the effective date of the Director Compensation Policy, nondiscretionary, automatic grants of equity awards will be made to the combined company's non-employee directors as follows:

Merger Award. Each person who is a non-employee director as of the effective date of the Director Compensation Policy will be granted an award of stock options to purchase 25,400 shares of the combined company's common stock (subject to further adjustment based on the proposed reverse stock split) (the "Merger Award"), with such number subject to equitable adjustment by the combined company's board in the event of certain capitalization adjustments. The Merger Award will be granted automatically on the first trading day on or after the effective date of the Director Compensation Policy. The Merger Award will vest in equal monthly installments over thirty-six (36) months on the same day of each relevant month as the applicable vesting date, subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

Initial Award. Each person who first becomes a non-employee director following the effective date of the Director Compensation Policy (whether by election or appointment) and who does not receive a Merger Award, will be granted an award of stock options to purchase 25,400 shares of the combined company's common stock (subject to further adjustment based on the proposed reverse stock split) (the "Initial Award"), with such number subject to equitable adjustment by the combined company's board in the event of certain capitalization adjustments. The Initial Award will be granted automatically on the first trading day on or after the date the individual first becomes a non-employee director. If an individual is a member of the combined company's board and also an employee, becoming a non-employee director due to termination of employment will not entitle the non-employee director to an Initial Award. Each Initial Award will be scheduled to vest over thirty-six (36) months on the same day of each relevant month as the applicable vesting date, subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

Annual Award. On the first trading day following each annual meeting of the combined company's stockholders following the merger (the "Annual Award"), each non-employee director will be granted an award to purchase 12,700 shares of the combined company's common stock (subject to further adjustment based on the proposed reverse stock split), with such number subject to equitable adjustment by the combined company's board in the event of certain capitalization adjustments. The first Annual Award granted to an individual who first becomes a non-employee director following the effective date of the Director Compensation Policy will cover a number of shares equal to the product of (A) 12,700 (subject to further adjustment based on the proposed reverse stock split) multiplied by (B) a fraction, (i) the numerator of which is the number of fully completed months between the applicable initial start date of the non-employee director and the date of the first annual meeting of the combined company's stockholders to occur after the individual first becomes a non-employee director, and (ii) the denominator of which is twelve (12), with such number subject to equitable adjustment by the combined company's board in the event of certain capitalization adjustments. The Annual Award will be scheduled to vest in full on the first anniversary of the date on which the Annual Award is granted, subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

If a change in control occurs (as defined in the 2024 Plan), each non-employee director will fully vest in his or her outstanding equity awards immediately prior to the change in control, including any Merger Awards, Initial Awards and Annual Awards, subject to the non-employee director continuing to be a non-employee director through the date of the change in control.

Non-employee directors may also be eligible to receive other compensation and benefits, as may be determined by the combined company's board or any committee of the combined company's board designated by the combined company's board with appropriate authority, as applicable, from time to time.

The combined company's board or any committee of the combined company's board designated by the combined company's board with appropriate authority, as applicable and in its discretion, may change and revise the terms of Merger Awards, Initial Awards and Annual Awards granted under the Director Compensation Policy, including, without limitation, the number of shares subject to each award and type of award.

Executive Change in Control and Severance Policy

In connection with the closing, it is expected that the combined company will adopt an executive change in control and severance policy (the "Severance Policy") for eligible employees of the combined company, including the executive officers and other key employees, effective as of the Effective Date. The Severance Policy is designed to be an "employee welfare benefit plan" (as defined in Section 3(1) of the Employee Retirement Income Security Act of 1974, as amended). It is expected that the compensation committee of the board of directors of the combined entity will administer the Severance Policy, and designate individuals as eligible to participate in the Severance Policy, whether individually or by position or category of position. Each participant in the Severance Policy must execute a participation agreement (each an "Eligible Employee").

Pursuant to the Severance Policy, upon a termination of an Eligible Employee's employment (x) by the combined company without Cause (as such term is defined in the Severance Policy) (excluding by reason of the Eligible Employee's death or disability) or (y) by the Eligible Employee for Good Reason (as such term is defined in the Severance Policy) (such termination, a "Qualified Termination"), in either case, outside of the period beginning 3 months prior to a Change in Control (as such term is defined in the Severance Policy) and ending 12 months following a Change in Control (the "Change in Control Period"), (the "Non-CIC Qualified Termination"), Eligible Employees will be eligible to receive (i) a lump sum payment equal to (A) 12 months of annualized base salary with respect to the combined company's Chief Executive Officer, (B) 9 months of annualized base salary with respect to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer, and (C) 3 months plus 2 weeks per year of continuous service of annualized base salary with respect to the combined company's Vice Presidents, and (ii) subject to a valid election under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the cost of such continuation coverage for the Eligible Employee and any of the Eligible Employee's eligible dependents that were covered under the combined company's health care plans immediately prior to the date of his or her Non-CIC Qualified Termination until the earliest of the date which the Eligible Employee or their eligible dependents become covered under similar plans, the date which the Eligible Employee ceases to be eligible for coverage under COBRA, or (A) 12 months following the Non-CIC Qualified Termination with respect to the combined company's Chief Executive Officer, (B) 9 months following the Non-CIC Qualified Termination with respect to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer, and (C) 3 months plus 2 weeks per year of continuous service following the Non-CIC Qualified Termination with respect to the combined company's Vice Presidents. Any unvested portion of the Eligible Employee's then-outstanding equity awards will remain outstanding until the earlier of (A) 3 months following the Non-CIC Qualified Termination or (B) the occurrence of a Change in Control, provided that, if no Change in Control occurs within the 3 months following a Non-CIC Qualified Termination, any unvested portion of the Eligible Employee's equity awards automatically and permanently will be forfeited on the 3-month anniversary following such termination date without having vested.

If a Qualified Termination occurs during a Change in Control Period (the "CIC Qualified Termination"), the Eligible Employee will be entitled to receive (i) a lump sum payment equal to (A) 18 months of annualized base salary with respect to the combined company's Chief Executive Officer, (B) 12 months of annualized base salary with respect to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer, and (C) 6 months of annualized base salary with respect to the combined company's Vice Presidents, (ii) subject to a valid election under COBRA, the cost of such continuation coverage

for the Eligible Employee and any of the Eligible Employee's eligible dependents that were covered under the combined company's health care plans immediately prior to the date of his or her CIC Qualified Termination until the earliest of the date which the Eligible Employee or their eligible dependents become covered under similar plans, the date which the Eligible Employee ceases to be eligible for coverage under COBRA, or (A) 18 months following the CIC Qualified Termination with respect to the combined company's Chief Executive Officer, (B) 12 months following the CIC Qualified Termination with respect to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer, and (C) 6 months following the CIC Qualified Termination with respect to the combined company's Vice Presidents, (iii) a lump-sum payment equal to a percentage of the Eligible Employee's target bonus in effect for the fiscal year which the CIC Qualified Termination occurs in, which such percentage is (A) 150% with respect to the combined company's Chief Executive Officer, (B) 100% with respect to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer, and (C) 50% with respect to the combined company's Vice Presidents, and (iv) acceleration of vesting as to 100% of the then-unvested shares or rights subject to all of the Eligible Employee's equity awards. In the case of an equity award subject to performance-based vesting conditions, unless otherwise specified in the applicable equity award agreement governing the award, all performance goals and other vesting criteria will be deemed achieved at target.

The Severance Policy will further provide that if any payment or benefit that an Eligible Employee would receive from the combined company or any other party (the "Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment will be equal to the Best Results Amount. The "Best Results Amount" will be either (x) the full amount of such Payment or (y) such lesser amount as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Eligible Employee's receipt, on an after-tax basis, of the greater amount notwithstanding that all or some portion of the Payment may be subject to the Excise Tax.

The receipt of payments and benefits under the Severance Policy is subject to the Eligible Employee signing and not revoking a separation agreement and release of claims no later than the sixtieth (60th) day following the Eligible Employee's termination.

For purposes of the Severance Policy, for the avoidance of doubt, it is expected that Mr. Schimmelpennink will participate at the level of benefits provided to the combined company's Chief Executive officer, and Mr. Olsson and Dr. Odrich will participate at the level of benefits provided to the combined company's Senior Vice Presidents and Executive Officers other than the combined company's Chief Executive Officer.

Executive Offer Letters

In connection with the closing, each of the combined company's executive officers is expected to enter into a confirmatory offer letter in connection with the closing, effective as of the effective time. Mr. Schimmelpennink's confirmatory offer letter will provide for an annual base salary of $630,000 and an annual target bonus opportunity of 55% of his annual base salary. Mr. Olsson's confirmatory offer letter will provide for an annual base salary of $433,000 and an annual target bonus opportunity of 40% of his annual base salary. Dr. Odrich's confirmatory offer letter will provide for an annual base salary of $485,000 and an annual target bonus opportunity of 40% of his annual base salary. In addition to base salary and target bonuses, the confirmatory offer letters will provide that the combined company's executive officers will be eligible to participate in the combined company's standard benefit plans in effect from time to time and to receive compensatory equity awards such as stock options or restricted stock unit awards from the combined company on the terms and conditions determined by the combined company's board of directors in its sole discretion.

Executive Incentive Compensation Plan

The LENZ board of directors approved an Employee Incentive Compensation Plan (the "Incentive Compensation Plan") to provide periodic incentive bonus opportunities to the employees of the combined company, and recommend that the Graphite board of directors approve the Incentive Compensation Plan to become effective upon closing.

The Incentive Compensation Plan will allow the plan's administrator to grant incentive awards, generally payable in cash, to employees selected by the compensation committee, including the executive officers of the combined company, based upon performance goals established by the compensation committee.

Under the Incentive Compensation Plan, the plan's administrator will determine the performance goals, if any, applicable to any award, which goals may include, without limitation, goals related to: attainment of research and development milestones; sales bookings; business divestitures and acquisitions; capital raising; cash flow; cash position; contract awards or backlog; corporate transactions; customer renewals; customer retention rates from an acquired company, subsidiary, business unit or division; earnings (which may include any calculation of earnings, including but not limited to earnings before interest and taxes, earnings before taxes, earnings before interest, taxes, depreciation and amortization and net taxes); earnings per share; expenses; financial milestones; gross margin; growth in stockholder value relative to the moving average of the S&P 500 Index or another index; internal rate of return; leadership development or succession planning; license or research collaboration arrangements; market share; net income; net profit; net sales; new product or business development; new product invention or innovation; number of customers; operating cash flow; operating expenses; operating income; operating margin; overhead or other expense reduction; patents; procurement; product defect measures; product release timelines; productivity; profit; regulatory milestones or regulatory-related goals; retained earnings; return on assets; return on capital; return on equity; return on investment; return on sales; revenue; revenue growth; sales results; sales growth; savings; stock price; time to market; total stockholder return; working capital; unadjusted or adjusted actual contract value; unadjusted or adjusted total contract value; and individual objectives such as peer reviews or other subjective or objective criteria. As determined by the administrator, the performance goals may be based on U.S. generally accepted accounting principles ("GAAP") or non GAAP results and any actual results may be adjusted by the administrator for one-time items or unbudgeted or unexpected items and/or payments of actual awards under the Incentive Compensation Plan when determining whether the performance goals have been met. The performance goals may be based on any factors the administrator determines relevant, including without limitation on an individual, divisional, portfolio, project, business unit, segment or company-wide basis. Any criteria used may be measured on such basis as the administrator determines, including without limitation: (a) in absolute terms, (b) in combination with another performance goal or goals (for example, but not by way of limitation, as a ratio or matrix), (c) in relative terms (including, but not limited to, results for other periods, passage of time and/or against another company or companies or an index or indices), (d) on a per-share basis, (e) against the performance of the combined company as a whole or a segment of the combined company and/or (f) on a pre-tax or after-tax basis. The performance goals may differ from participant to participant and from award to award. The administrator also may determine that a target award (or portion thereof) will not have a performance goal associated with it but instead will be granted (if at all) as determined by the administrator.

The compensation committee of the board of directors of the combined company is expected to administer the Incentive Compensation Plan and may, in its sole discretion and at any time prior to payment of an actual award, increase, reduce or eliminate a participant's actual award, and/or increase, reduce or eliminate the amount allocated to the bonus pool for a particular performance period. The actual award may be below, at or above a participant's target award, as determined by the administrator. The administrator may determine the amount of any increase, reduction or elimination on the basis of such factors as it deems relevant, and it will not be required to establish any allocation or weighting with respect to the factors it considers.

Actual awards generally will be paid in cash (or its equivalent) in a single lump sum only after they are earned, and, unless otherwise determined by the administrator, to earn an actual award a participant must be employed by us through the date the actual award is paid. The administrator of the Incentive Compensation Plan

may reserve the right to settle an actual award with a grant of an equity award, which equity award may have such terms and conditions, including vesting, as the administrator determines. Payment of awards will occur as soon as practicable after the end of the performance period to which the award relates and after the actual award is approved by the administrator, but no later than the dates set forth in the Incentive Compensation Plan.

Awards under the Incentive Compensation Plan will be subject to any clawback policy of the combined company, which the combined company may be required to adopt from time to time to comply with applicable laws. The administrator also may impose such other clawback, recovery or recoupment provisions with respect an award under the Incentive Compensation Plan as the administrator determines necessary or appropriate, including, without limitation, a reacquisition right in respect of previously acquired cash, stock or other property provided with respect to an award. Certain participants may be required to reimburse us for certain amounts paid under an award under the Incentive Compensation Plan in connection with certain accounting restatements we may be required to prepare due to our material noncompliance with any financial reporting requirements under applicable securities laws, as a result of misconduct.

The administrator will have the authority to amend, suspend or terminate the Incentive Compensation Plan, provided such action does not alter or impair the existing rights of any participant with respect to any earned awards.

2024 Equity Incentive Plan

On January 15, 2024, the Graphite board of directors, subject to stockholder approval and the closing, adopted the 2024 Plan. If the Graphite stockholders approve the 2024 Plan, which is the combined company's 2024 Equity Incentive Plan, it will become effective upon the closing. For a summary of the 2024 Plan, see the section titled "*Proposal No. 3—The 2024 Plan Proposal*" beginning on page 265 of this proxy statement/prospectus. The combined company's executive officers and directors will be eligible to participate in the 2024 Plan.

2024 Employee Stock Purchase Plan

On January 15, 2024, the Graphite board of directors, subject to stockholder approval and the closing, adopted the 2024 ESPP. If the Graphite stockholders approve the 2024 ESPP, which is the combined company's 2024 Employee Stock Purchase Plan, it will become effective upon the closing. For a summary of the 2024 ESPP, see the section titled "*Proposal No. 4—The 2024 ESPP Proposal*" beginning on page 275 of this proxy statement/prospectus. The combined company's executive officers will be eligible to participate in the 2024 ESPP.

Indemnification and Insurance

For a discussion of the indemnification and insurance provisions related to LENZ's directors and officers under the Merger Agreement, please see the section titled "*The Merger Agreement—Indemnification and Insurance for Directors and Officers*" beginning on page 216 of this proxy statement/prospectus.

Form of the Merger

Subject to the terms and conditions of the Merger Agreement, and in accordance with Delaware law, at the completion of the merger, Merger Sub, a wholly owned subsidiary of Graphite formed by Graphite in connection with the merger, will merge with and into LENZ, with LENZ surviving as a wholly owned subsidiary of the Graphite. In connection with the merger, Graphite will be renamed "LENZ Therapeutics, Inc." and will continue trading on Nasdaq under the symbol "LENZ".

Merger Consideration

At the effective time, upon the terms and subject to the conditions set forth in the Merger Agreement:

- any shares of LENZ common stock held as treasury stock or owned, directly or indirectly, by Graphite immediately prior to the effective time of the merger shall be cancelled and retired and shall cease to exist with no consideration delivered in exchange;
- each then-outstanding share of LENZ common stock (excluding shares held as treasury stock and automatically cancelled pursuant to the Merger Agreement and excluding dissenting shares, but including any LENZ restricted shares) will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio, (b) each then-outstanding share of LENZ preferred stock will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of LENZ common stock into which each share of LENZ preferred stock is then convertible, (c) each then-outstanding LENZ option will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement and (d) each then-outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement;
- if any shares of LENZ capital stock outstanding immediately prior to the effective time are unvested or subject to a repurchase option or risk of forfeiture under any applicable restricted stock purchase agreement or other similar agreement, then the shares of Graphite common stock issued in exchange for such shares of LENZ capital stock will to the same extent be unvested and subject to the same repurchase option or risk of forfeiture, and such shares of Graphite common stock shall accordingly be marked with appropriate legends; and
- no fractional shares of Graphite common stock will be issuable to LENZ stockholders pursuant to the Merger, and no certificates or scrip for any such fractional shares shall be issued, and any fractional shares of Graphite common stock resulting from the conversion of shares of LENZ common stock (including shares of LENZ common stock issued upon conversion of LENZ preferred stock) into the right to receive a number of Graphite common stock equal to the exchange ratio or from the settlement of LENZ options pursuant to the Merger Agreement (after aggregating all fractional shares of Graphite common stock issuable to such holder) will be rounded to the nearest whole share of Graphite common stock, with no cash being paid for any fractional share of Graphite common stock eliminated by such rounding.

Procedures for Effecting the Reverse Split and Exchange of Stock Certificates

Prior to the closing date, Graphite will select an exchange agent and, at the effective time, Graphite will deposit with the exchange agent evidence of book-entry shares representing the shares of Graphite common stock issuable pursuant to the terms of the Merger Agreement in exchange for shares of LENZ common stock or LENZ preferred stock. Promptly after the effective time and no more than ten (10) business days prior to the anticipated closing date, the exchange agent will mail to each record holder of LENZ capital stock converted into the right to receive consideration in the merger (i) a letter of transmittal and (ii) instructions for surrendering the record holder's stock certificates in exchange for the merger consideration. Upon delivery to the exchange agent of a duly executed letter of transmittal in accordance with the exchange agent's instructions, the surrender of the record holder's stock certificates (including electronic surrender) to the exchange agent and delivery to the exchange agent of such other documents as may be reasonably required by the exchange agent or Graphite, the record holder of such stock certificates or book-entry shares, as applicable, will be entitled to receive in exchange therefor book-entry shares representing the number of whole shares of Graphite common stock issuable to such holder pursuant to the Merger Agreement. The surrendered certificates representing shares of LENZ common stock or LENZ preferred stock will be cancelled.

After the effective time, each certificate representing LENZ common stock or LENZ preferred stock that has not been surrendered will represent only the right to receive shares of Graphite common stock issuable pursuant to the Merger Agreement to which the holder of any such certificate is entitled.

HOLDERS OF LENZ COMMON STOCK OR LENZ PREFERRED STOCK SHOULD NOT SEND IN THEIR LENZ STOCK CERTIFICATES UNTIL THEY RECEIVE A LETTER OF TRANSMITTAL FROM THE EXCHANGE AGENT WITH INSTRUCTIONS FOR THE SURRENDER OF LENZ STOCK CERTIFICATES.

Effective Time of the Merger

The Merger Agreement requires the parties to consummate the merger as promptly as practicable (and in any event within two business days) after all of the conditions to the consummation of the merger contained in the Merger Agreement are satisfied or waived, including the adoption of the Merger Agreement by the LENZ stockholders and the approval by the Graphite stockholders of the issuance of Graphite common stock and the other transactions proposed under the Merger Agreement, other than those conditions that by their nature are to be satisfied at the closing. The merger will become effective upon the filing of a certificate of merger with the Secretary of State of the State of Delaware or at such later time as is agreed by Graphite and LENZ and specified in the certificate of merger. Neither Graphite nor LENZ can predict the exact timing of the consummation of the merger.

Regulatory Approvals

In the United States, Graphite must comply with applicable federal and state securities laws and the rules and regulations of Nasdaq in connection with the issuance of shares of Graphite common stock to LENZ stockholders in connection with the transactions contemplated by the Merger Agreement and the filing of this proxy statement/prospectus with the SEC. Under the Merger Agreement, the merger cannot be completed until the waiting period (and any extensions thereof), if any, applicable to the merger under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), has expired or otherwise been terminated. The initial waiting period under the HSR Act is expected to expire at 11:59 p.m., Eastern Time, on December 21, 2023.

Material U.S. Federal Income Tax Considerations

Material U.S. Federal Income Tax Consequences of the Merger

The following discussion is a summary of the material U.S. federal income tax considerations generally applicable to U.S. holders (as defined below) of LENZ capital stock who exchange shares of LENZ capital stock for shares of Graphite common stock pursuant to the merger. This section applies only to persons that hold their LENZ capital stock as capital assets for U.S. federal income tax purposes (generally, property held for investment). With respect to any holder of LENZ capital stock whose shares were subject to vesting restrictions at the time such shares were acquired, the discussion assumes that a valid election pursuant to Section 83(b) of the Code was made with respect to such shares. Furthermore, this discussion assumes that a valid election pursuant to Section 83(b) of the Code will be made with respect to any shares of Graphite common stock that are issued in the merger subject to vesting restrictions. This discussion is a summary only and does not discuss all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances or status including:

- brokers, dealers or traders in securities, banks, insurance companies, other financial institutions or mutual funds;
- real estate investment trusts; regulated investment companies; tax-exempt organizations or governmental organizations; qualified foreign pension funds (or entities wholly owned by one or more qualified foreign pension funds);
- pass-through entities such as partnerships, S corporations, disregarded entities for U.S. federal income tax purposes and limited liability companies treated as such for U.S. federal income tax purposes (and investors therein);
- persons who hold their shares as part of a straddle, hedge, wash sale, synthetic security, constructive sale, conversion transaction or other integrated transaction;
- U.S. holders that have a functional currency other than the U.S. dollar;
- persons that are not U.S. holders (as defined below);

- persons that actually or constructively own five percent or more of LENZ voting shares or five percent or more of the total value of all classes of shares of LENZ;
- taxpayers that are subject to the mark-to-market accounting rules;
- persons who hold shares of LENZ capital stock that constitute "qualified small business stock" under Section 1202 of the Code or as "Section 1244 stock" for purposes of Section 1244 of the Code;
- persons who acquired their shares of LENZ capital stock in a transaction subject to the gain rollover provisions of Section 1045 of the Code;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to LENZ capital stock being taken into account in an "applicable financial statement" (as defined in the Code);
- persons holding or beneficially owning LENZ capital stock who exercise appraisal or dissenters' rights;
- persons who acquired their shares of LENZ capital stock pursuant to the exercise of options or otherwise as compensation or through a tax-qualified retirement plan or through the exercise of a warrant or conversion right under convertible instruments; and
- expatriates or former citizens or long-term residents of the United States.

This discussion is based on the Code, proposed, temporary and final Treasury Regulations promulgated under the Code, and judicial and administrative interpretations thereof, all as of the date hereof. All of the foregoing is subject to change, which change could apply retroactively and could affect the tax considerations described herein. This discussion does not address U.S. federal taxes other than those pertaining to U.S. federal income taxation (such as estate or gift taxes, the alternative minimum tax or the Medicare tax on investment income), nor does it address any aspects of U.S. state or local or non-U.S. taxation.

Neither Graphite nor LENZ has sought or intends to seek any rulings from the Internal Revenue Service (the "IRS") regarding the merger. There can be no assurance that the IRS will not take positions inconsistent with the considerations discussed below or that any such positions would not be sustained by a court.

If any entity or arrangement classified as a partnership for U.S. federal income tax purposes holds LENZ capital stock, the tax treatment of such partnership and any person treated as a partner of such partnership will generally depend on the status and activities of the partner and the activities of the partnership. Partnerships holding any LENZ capital stock and persons that are treated as partners of such partnerships should consult their tax advisors as to the particular U.S. federal income tax consequences of the merger to them.

As used herein, a "U.S. holder" is a beneficial owner of LENZ capital stock that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity that is treated as a corporation for U.S. federal income tax purposes) that is created or organized (or treated as created or organized) in or under the laws of the United States, any state thereof or the District of Columbia or otherwise treated as a U.S. tax resident for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the administration of such trust and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) it has a valid election in place to be treated as a U.S. person (within the meaning of Section 7701(a)(30) of the Code).

Intended Tax Treatment of the Merger

In the opinion of Wilson Sonsini, the merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Code, and, the material U.S. federal income tax consequences of the merger to LENZ U.S. holders are as described below under the heading "*—Effects of the Merger to U.S. Holders of LENZ Capital Stock*." This opinion is based on facts and representations contained in representation letters provided to Wilson Sonsini by Graphite, Merger Sub and LENZ and certain assumptions, including that the merger is completed in the manner set forth in the Merger Agreement and the registration statement on Form S-4 of which this proxy statement/prospectus forms a part. The accuracy of such facts, representations and assumptions could affect the conclusions set forth in such opinion. In addition, none of the parties to the Merger Agreement have sought or intend to seek any ruling from the IRS regarding the qualification of the merger as a reorganization within the meaning of Section 368(a) of the Code. Accordingly, there can be no assurance that the IRS will not assert that the transaction fails to qualify as a reorganization or that a court would not sustain such a challenge. If the IRS were to challenge the "reorganization" status of the merger successfully, the tax consequences would differ from those set forth in this proxy statement/prospectus.

Effects of the Merger to U.S. Holders of LENZ Capital Stock

Subject to the qualifications and assumptions described in this proxy statement/prospectus, the U.S. federal income tax consequences to U.S. holders of LENZ capital stock who exchange all of their shares of LENZ capital stock for Graphite common stock generally will be as follows:

- A U.S. holder will not recognize any gain or loss upon the exchange of LENZ capital stock for Graphite common stock pursuant to the merger.
- A U.S. holder's aggregate tax basis in the shares of Graphite common stock received in the merger will equal such U.S. holder's aggregate adjusted tax basis in the shares of LENZ capital stock surrendered in the merger.
- The holding period of the shares of Graphite common stock received by a U.S. holder in the merger will include such U.S. holder's holding period for the shares of LENZ capital stock surrendered in the merger.

If a U.S. holder holds different blocks of LENZ capital stock (generally, LENZ capital stock in different class or acquired on different dates or at different prices), such U.S. holder should consult its tax advisor with respect to the determination of the tax bases and/or holding periods of the shares of Graphite common stock received in the merger.

U.S. holders who owned at least one percent (by vote or value) of the total outstanding stock of LENZ or who owned securities in LENZ with a basis of $1,000,000 or more are required to attach a statement to their tax returns for the year in which the merger is consummated that contains the information listed in Treasury Regulations Section 1.368-3(b). Such statement must include the U.S. holder's tax basis in the holder's LENZ capital stock and the fair market value of such stock.

This discussion of material U.S. federal income tax considerations of the merger is for general information purposes only and is not intended to be, and should not be construed as, tax advice. Determining the actual tax consequences of the merger to you may be complex and will depend on your specific situation and on factors that are not within Graphite's or LENZ's knowledge or control. You should consult your tax advisors with respect to the application of U.S. federal income tax laws to your specific situation as well as any tax consequences arising under the U.S. federal estate or gift tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction.

Material U.S. Federal Income Tax Consequences of the Special Cash Dividend to Holders of Graphite Common Stock

The following discussion is a summary of the material U.S. federal income tax considerations generally applicable to holders of Graphite common stock who receive the special cash dividend. This section applies only to

persons that hold their Graphite common stock as capital assets for U.S. federal income tax purposes (generally, property held for investment). This discussion is a summary only and does not discuss all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances or status including:

- brokers, dealers or traders in securities, banks, insurance companies, other financial institutions or mutual funds;
- real estate investment trusts; regulated investment companies; tax-exempt organizations or governmental organizations; qualified foreign pension funds (or entities wholly owned by one or more qualified foreign pension funds);
- controlled foreign corporations, passive foreign investment companies, pass-through entities such as partnerships, S corporations, disregarded entities for U.S. federal income tax purposes and limited liability companies treated as such for U.S. federal income tax purposes (and investors therein);
- persons that have a functional currency other than the U.S. dollar;
- persons that actually or constructively own five percent or more of Graphite voting shares or five percent or more of the total value of all classes of shares of Graphite;
- taxpayers that are subject to the mark-to-market accounting rules;
- persons who hold shares of Graphite common stock that constitute "qualified small business stock" under Section 1202 of the Code or as "Section 1244 stock" for purposes of Section 1244 of the Code;
- persons who acquired their shares of Graphite common stock in a transaction subject to the gain rollover provisions under Section 1045 of the Code;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to Graphite common stock being taken into account in an "applicable financial statement" (as defined in the Code);
- persons that hold securities in Graphite as part of a straddle, constructive sale, hedging, conversion or other integrated or similar transaction;
- persons who acquired their shares of Graphite common stock pursuant to the exercise of options or otherwise as compensation or through a tax-qualified retirement plan or through the exercise of a warrant or conversion right under convertible instruments; and
- expatriates or former citizens or long-term residents of the United States.

This discussion is based on the Code, proposed, temporary and final Treasury Regulations promulgated under the Code, and judicial and administrative interpretations thereof, all as of the date hereof. All of the foregoing is subject to change, which change could apply retroactively and could affect the tax considerations described herein. This discussion does not address U.S. federal taxes other than those pertaining to U.S. federal income taxation (such as estate or gift taxes, the alternative minimum tax or the Medicare tax on investment income), nor does it address any aspects of U.S. state or local or non-U.S. taxation.

Graphite has not and does not intend to seek any rulings from the IRS regarding the special cash dividend. There can be no assurance that the IRS will not take positions inconsistent with the considerations discussed below or that any such positions would not be sustained by a court.

If any entity or arrangement classified as a partnership for U.S. federal income tax purposes holds Graphite common stock, the tax treatment of such partnership and any person treated as a partner of such partnership will generally depend on the status and activities of the partner and the activities of the partnership. Partnerships holding any Graphite common stock and persons that are treated as partners of such partnerships should consult their tax advisors as to the particular U.S. federal income tax consequences of the special cash dividend to them.

As used herein, a "U.S. holder" is a beneficial owner of Graphite common stock that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity that is treated as a corporation for U.S. federal income tax purposes) that is created or organized (or treated as created or organized) in or under the laws of the United States, any state thereof or the District of Columbia or otherwise treated as a U.S. tax resident for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the administration of such trust and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) it has a valid election in place to be treated as a U.S. person (within the meaning of Section 7701(a)(30) of the Code).

For purposes of this discussion, a "non-U.S. holder" means a beneficial owner of Graphite common stock that is neither a U.S. holder nor a partnership (or other entity treated as a partnership) for U.S. federal income tax purposes.

This discussion assumes that the distribution of the special cash dividend to holders of Graphite common stock will be treated for U.S. federal income tax purposes as a transaction that is separate and distinct from the merger and the proposed reverse stock split. If, contrary to that assumption, the distribution of the special cash dividend to a holder of Graphite common stock were integrated for tax purposes with the proposed reverse stock split, this could affect the calculation of the extent to which the distribution constitutes a taxable dividend or capital gain.

Receipt of the Special Cash Dividend by U.S. Holders

The distribution of the special cash dividend should be treated first as a dividend to the extent of Graphite's current and accumulated earnings and profits, then as a non-taxable return of capital to the extent of the U.S. holder's basis in its Graphite common stock, and then as capital gain from the sale or exchange of Graphite common stock with respect to any remaining value. Graphite currently has an accumulated deficit and expects additional losses in the current period. Thus, Graphite expects most or all of the distribution of the special cash dividend to be treated as other than a dividend for U.S. federal income tax purposes. However, there can be no assurance that it will be so treated.

Receipt of the Special Cash Dividend by Non-U.S. Holders

The distribution of the special cash dividend should be treated first as a dividend to the extent of Graphite's current and accumulated earnings and profits, then as a non-taxable return of capital to the extent of the non-U.S. holder's basis in its Graphite common stock, and then as capital gain from the sale or exchange of Graphite common stock with respect to any remaining amount. Graphite currently has an accumulated deficit and expects additional losses in the current period. Thus, Graphite expects most or all of the distribution of the special cash dividend to be treated as other than a dividend for U.S. federal income tax purposes. However, there can be no assurance that it will be so treated, if Graphite cannot determine at the time of the distribution of the special cash dividend whether or not the amount of such distribution will exceed current and accumulated earnings and profits, Graphite or the applicable withholding agent may withhold at the rate applicable to dividends on the full amount of the distribution, as described below.

Taxable Dividends

Dividend payments to a non-U.S. holder will generally be subject to withholding at a 30% rate. If a non-U.S. holder is eligible for a lower treaty rate, then withholding will be at such lower treaty rate only if such

non-U.S. holder provides a valid IRS Form W-8BEN or W-8BEN-E (or applicable successor form) certifying such non-U.S. holder's qualification for the reduced rate. If a non-U.S. holder holds the stock through a financial institution or other intermediary, the non-U.S. holder will be required to provide appropriate documentation to the intermediary, which then will be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. Non-U.S. holders who do not timely provide the applicable withholding agent with the required certification, but who qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim with the IRS.

Subject to the discussion below regarding backup withholding, if the issuance of the special cash dividend is effectively connected with a non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which the special cash dividend is attributable), the non-U.S. holder will be exempt from U.S. federal withholding tax and the distribution of the special cash dividend generally will be subject to U.S. federal income tax on a net income basis in the same manner as if such non-U.S. holder were a U.S. holder. To claim the exemption, the non-U.S. holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI (or applicable successor form), certifying that the distribution of the special cash dividend is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States. A non-U.S. holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) of all or a portion of its effectively connected earnings and profits for the taxable year.

Any withholding required by Graphite or other applicable withholding agents may be satisfied by Graphite or such agent by withholding from the special cash dividend or from other property of the non-U.S. holder held in an account with the applicable withholding agent.

Non-Dividend Distributions

To the extent that the distribution of the special cash dividend is treated as capital gain from the sale or exchange of Graphite common stock, such gain generally will not be subject to U.S. federal income tax unless (i) such gain is effectively connected with the conduct by a non-U.S. holder of a trade or business in the United States (and, if an income tax treaty applies, the gain is generally attributable to a U.S. permanent establishment maintained by such non-U.S. holder), (ii) in the case of gain realized by a non-U.S. holder that is an individual, such non-U.S. holder is present in the United States for a period or periods aggregating 183 days or more in the taxable year of the sale and certain other conditions are met or (iii) Graphite is or has been a "United States real property holding corporation" ("USRPHC") for U.S. federal income tax purposes and, if the shares are "regularly traded on an established securities market," such non-U.S. holder owned, directly or indirectly, at any time during the shorter of the five-year period ending on the date of the distribution and the non-U.S. holder's holding period in the Graphite common stock, more than 5% of the shares of Graphite common stock and such non-U.S. holder is not eligible for any treaty exemption. The shares will be considered "regularly traded" if they are traded on an established securities market located in the United States and are regularly quoted by brokers or dealers making a market in the shares. Graphite believes it is not, and has not been, a USRPHC for U.S. federal income tax purposes.

A non-U.S. holder should consult its tax advisor regarding its entitlement to benefits and the various rules under applicable tax treaties.

Information Reporting and Backup Withholding

In general, the issuance of the special cash dividend to U.S. holders will be reported to the IRS unless the holder is an exempt recipient. Backup withholding, currently at a rate of 24%, may apply unless the U.S. holder (1) is an exempt recipient or (2) provides a certificate (generally on an IRS Form W-9) containing the U.S. holder's name, address, correct federal taxpayer identification number and statement that the U.S. holder is a U.S. person and is not subject to backup withholding. A non-U.S. holder will not be subject to backup withholding with respect to the issuance of the special cash dividend, provided the non-U.S. holder certifies its

non-U.S. status, such as by providing a valid IRS Form W-8BEN or W-8ECI or W-8BEN-E, or otherwise establishes an exemption. However, information returns will be filed with the IRS in connection with the issuance of the special cash dividend, regardless of whether any tax was actually withheld. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or credit against a holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Foreign Account Tax Compliance Act

Sections 1471-1474 of the Code and the Treasury Regulations issued thereunder, commonly referred to collectively as the Foreign Account Tax Compliance Act ("FATCA"), generally impose a U.S. federal withholding tax of 30% on dividends on Graphite common stock paid to a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on Graphite common stock paid to a "non-financial foreign entity" (as defined under these rules) unless such entity provides the withholding agent with a certification identifying the direct and indirect U.S. owners of the entity, certifies that it does not have any substantial U.S. owners, or otherwise establishes an exemption. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of taxes withheld under FATCA. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Holders of Graphite common stock are urged to consult with their tax advisors regarding the possible implications of FATCA on the receipt of the special cash dividend on Graphite common stock.

Nasdaq Stock Market Listing

Shares of Graphite common stock are currently listed on Nasdaq under the symbol "GRPH". Graphite has agreed to use commercially reasonable efforts to maintain its existing listing on Nasdaq and to cause the shares of Graphite common stock being issued in the merger to be approved for listing on Nasdaq at or prior to the effective time.

In addition, under the Merger Agreement, each of Graphite's and LENZ's obligation to complete the merger is subject to the satisfaction or waiver by each of the parties, at or prior to the merger, of various conditions, including that the shares of Graphite common stock to be issued in the merger have been approved for listing (subject to official notice of issuance) on Nasdaq as of the closing.

If the Nasdaq listing application is accepted, Graphite anticipates that the common stock of the combined company will be listed on Nasdaq following the closing of the merger under the trading symbol "LENZ". In order for the Nasdaq listing application to be accepted, among other requirements, the combined company must maintain a bid price of $4.00 or higher for a certain period of time following the proposed reverse stock split.

Anticipated Accounting Treatment

The merger is expected to be treated by Graphite as a reverse merger and will be accounted for as a reverse recapitalization in accordance with GAAP. For financial reporting, LENZ is considered to be the accounting acquirer, based on the expectation that, immediately following the merger: (i) LENZ's equity holders will own a substantial majority of the voting rights in the combined company; (ii) LENZ will designate a majority (five of seven) of the initial members of the board of directors of the combined company; and (iii) LENZ's senior management will hold all key positions in senior management of the combined company. The combined

company will be named LENZ Therapeutics, Inc. and be headquartered in Del Mar, CA. Accordingly, the merger is expected to be treated as the equivalent of LENZ issuing stock to acquire the net assets of Graphite. As a result of the merger, LENZ's assets and liabilities will be recorded at their pre-combination carrying amounts and Graphite's assets and liabilities will be measured and recognized at their fair values as of the effective time. Upon consummation of the merger, the historical financial statements of LENZ will become the historical consolidated financial statements of the combined company. See the "*Unaudited Pro Forma Condensed Combined Financial Information*" included elsewhere in this proxy statement/prospectus for additional information.

Appraisal Rights

Under the DGCL, Graphite stockholders and beneficial owners of Graphite capital stock are not entitled to appraisal rights in connection with the merger. LENZ stockholders and beneficial owners of LENZ capital stock are entitled, under certain circumstances, to appraisal rights in connection with the merger under Section 262 of the DGCL ("Section 262"). Under Section 262, if a holder of LENZ capital stock (or beneficial owner of LENZ capital stock) who continuously holds or owns such shares through the effective time of the merger provides a written demand for appraisal of shares in accordance with Section 262, does not vote or consent in favor of adoption of the Merger Agreement and does not withdraw their demand and otherwise complies with Section 262, such stockholder or beneficial owner will be entitled to an appraisal by the Delaware Court of Chancery (the "Court") of the "fair value" of such stockholder's or beneficial owner's shares, exclusive of any element of value arising from the accomplishment or expectation of the merger, together with interest, if any, judicially determined by the Court and paid by the surviving corporation in cash.

The discussion below is not a complete summary regarding LENZ stockholders' or beneficial owners' appraisal rights under Delaware law and is qualified in its entirety by reference to the text of the relevant provisions of Section 262, which are attached as *Annex I* in this proxy statement/prospectus. Persons intending to exercise appraisal rights should consult with legal counsel and carefully review *Annex I*. Failure to follow precisely any of the statutory procedures set forth in *Annex I* may result in a termination or waiver of these rights. This summary does not constitute legal or other advice, nor does it constitute a recommendation that any persons exercise their appraisal rights under Delaware law. All references in Section 262 and in this summary to a "stockholder" or "holder" are to the record holder of shares immediately prior to the effective time, unless otherwise expressly noted herein. All references in Section 262 and in this summary to the words "beneficial owner" mean a person who is the beneficial owner of shares of stock held either in voting trust or by a nominee on behalf of such person, unless otherwise expressly noted. All references in Section 262 and in this summary to the word "person" mean any individual, corporation, partnership, unincorporated association or other entity, unless otherwise expressly noted.

Under Section 262, where a merger is adopted by stockholders by written consent in lieu of a meeting of stockholders pursuant to Section 228 of the DGCL, either the constituent corporation before the effective date of such merger or the surviving corporation, within 10 days after the effective date of such merger, must notify each stockholder of the constituent corporation entitled to appraisal rights of the approval of such merger and that appraisal rights are available. Such notice may, and, if given on or after the effective date of the merger, must also notify stockholders of the effective date of the merger. If the notice of appraisal rights did not notify stockholders of the effective date of the merger, either (i) the constituent corporation must send a second notice before the effective date of the merger notifying each stockholder entitled to appraisal rights of the effective date of the merger or (ii) the surviving corporation must send such second notice to each stockholder entitled to appraisal rights on or within 10 days after the effective date of the merger, provided, however, that if such second notice is sent more than 20 days following the sending of the first notice, such second notice need only be sent to those stockholders or beneficial owners entitled to appraisal rights and who have demanded appraisal of their shares in accordance with Section 262(d).

Only a holder of record or beneficial owner of shares of LENZ capital stock who has not consented to the merger will be entitled to seek appraisal. Holders of shares or beneficial owners of LENZ capital stock who desire to exercise their appraisal rights must deliver a written demand for appraisal to LENZ within 20 days after

the date of giving the notice of availability of appraisal rights, and that stockholder or beneficial owner must not have delivered a written consent approving the merger. A demand for appraisal must reasonably inform LENZ of the identity of the person making the demand and that such person intends thereby to demand appraisal of the shares of LENZ capital stock held of record or beneficially by such person; *provided* that if a written demand for appraisal is made by a beneficial owner, in such person's name, of shares that such person beneficially owns, such notice must reasonably identify the holder of record of the shares for which the demand is made and be accompanied by documentary evidence of such beneficial owner's beneficial ownership of stock and a statement that such documentary evidence is a true and correct copy of what it purports to be, and provide an address at which such beneficial owner consents to receive notices given by the surviving entity and to be set forth on the Verified List (as defined below) required by Section 262(f) of the DGCL. A holder of shares of LENZ capital stock or beneficial owner of shares of LENZ capital stock must continuously hold of record or beneficially own their shares from the date of making a written demand through the effective time of the merger. Failure to deliver a written consent approving the merger will not in and of itself constitute a written demand for appraisal satisfying the requirements of Section 262. All demands for appraisal should be mailed or delivered to LENZ Therapeutics, Inc., Attention: Corporate Secretary, 445 Marine View Ave. STE #320, Del Mar, CA, USA 92014 and should be executed by, or on behalf of, the person demanding appraisal.

A record owner, such as a broker, who holds shares as a custodian for others, may exercise the record owner's right of appraisal with respect to the shares held for one or more beneficial owners, while not exercising this right for other beneficial owners. In that case, the written demand should state the number of shares as to which appraisal is sought. Where no number of shares is expressly mentioned, the demand will be presumed to cover all shares held in the name of the record owner.

Within 120 days after the effective date of the merger, any person who has complied with Section 262 and delivered a demand for appraisal in accordance with Section 262 will, upon written request to the surviving corporation, be entitled to receive a written statement setting forth the aggregate number of shares not voted in favor of, or consented in writing to, the Merger Agreement and with respect to which demands for appraisal rights have been received and the aggregate number of record holders or beneficial owners of these shares (provided that where a beneficial owner makes a demand for appraisal directly, the record holder of such shares shall not be considered a separate stockholder holding such shares for purposes of this aggregate number). This written statement must be given to the requesting person within 10 days after such person's written request is received by the surviving corporation or within 10 days after expiration of the period for delivery of demands for appraisal, whichever is later. Within 120 days after the effective date of the merger, either the surviving corporation or any stockholder or beneficial owner who has delivered a demand for appraisal in accordance with Section 262 and has not withdrawn such stockholder's or beneficial owner's demand may file a petition in the Court demanding a determination of the fair value of the shares held by all such stockholders or beneficial owners. If, within 120 days after the effective time of the merger, no petition shall have been filed as provided above, all rights to appraisal will cease, and all dissenting stockholders or beneficial owners of LENZ capital stock who have demanded appraisal will become entitled to receive the consideration set forth in the Merger Agreement in exchange for their shares of LENZ capital stock, without interest. LENZ is not obligated and does not currently intend to file a petition.

Upon the filing of the petition by a stockholder or beneficial owner, service of a copy of the petition must be made upon the surviving corporation, which will then be obligated, within 20 days after such service, to file with the Delaware Register in Chancery a duly verified list (the "Verified List") containing the names and addresses of all persons who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached by the surviving corporation. Upon the filing of any such petition, the Court may order that notice of the time and place fixed for the hearing on the petition be mailed to the surviving corporation and all of the persons shown on the Verified List at the addresses stated therein. The costs of these notices are borne by the surviving corporation.

After notice is provided to the applicable persons who demanded appraisal of their shares, the Court is empowered to conduct a hearing upon the petition, and to determine those persons who have complied with Section 262 and who have become entitled to the appraisal rights provided thereby. The Court may require the

persons who have demanded appraisal for their shares and who hold stock represented by certificates to submit their stock certificates to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any person fails to comply with that direction, the Court may dismiss the proceedings as to such person. Accordingly, stockholders wishing to seek appraisal of their shares are cautioned to retain their share certificates pending resolution of the appraisal proceedings.

After determination of the persons entitled to appraisal of their shares, the Court will conduct the appraisal proceeding in accordance with the rules of the Court, including any rules specifically governing appraisal proceedings. Through such proceeding, the Court will determine the "fair value" of the shares owned by those persons. This value will be exclusive of any element of value arising from the accomplishment or expectation of the merger, together with interest, if any, upon the amount determined to be the fair value (or in certain circumstances as described below, on the difference between the amount determined to be the fair value and the amount paid by the surviving corporation in the merger to each person entitled to appraisal prior to the entry of judgment in the appraisal proceeding).

In determining fair value, the Court is required to take into account all relevant factors. In *Weinberger v. UOP, Inc.*, the Delaware Supreme Court discussed the factors that could be considered in determining fair value in an appraisal proceeding, stating that "proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court" should be considered, and that "[f]air price obviously requires consideration of all relevant factors involving the value of a company." The Delaware Supreme Court stated, in making this determination of fair value, that the court must consider market value, asset value, dividends, earnings, prospects, the nature of the enterprise and any other facts which could be ascertained as of the date of the merger which "throw any light on future prospects of the merged corporation."

Section 262 provides that fair value is to be "exclusive of any element of value arising from the accomplishment or expectation of the merger." In *Cede & Co. v. Technicolor, Inc.*, the Delaware Supreme Court stated that this exclusion is a "narrow exclusion [that] does not encompass known elements of value," but which rather applies only to the speculative elements of value arising from such accomplishment or expectation. In *Weinberger*, the Delaware Supreme Court held that "elements of future value, including the nature of the enterprise, which are known or susceptible of proof as of the date of the merger and not the product of speculation, may be considered."

Stockholders and beneficial owners of LENZ capital stock should be aware that the fair value of shares of LENZ capital stock as determined under Section 262 could be more than, the same as, or less than the value that stockholders are entitled to receive under the terms of the Merger Agreement.

Upon application by the surviving corporation or by any person entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the persons entitled to an appraisal. Any person whose name appears on the Verified List may participate fully in all proceedings until it is finally determined that such person is not entitled to appraisal rights. The Court will direct the payment of the fair value of the shares, together with interest, if any, by the surviving corporation to the persons entitled thereto. Payment will be so made to each such person upon such terms and conditions as the Court may order. The Court's decree may be enforced as other decrees in such Court may be enforced.

Unless the Court in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the payment of the judgment. At any time before the entry of judgment in the proceedings, the surviving corporation may pay to each person entitled to appraisal an amount in cash, in which case interest shall accrue thereafter only upon the sum of (i) the difference, if any, between the amount so paid and the fair value of the shares subject to appraisal as determined by the Court, and (ii) interest theretofore accrued, unless paid at that time. The surviving corporation is under no obligation to make such voluntary cash payment prior to such entry of judgment.

At any time within 60 days after the effective date of the merger, any person who has demanded an appraisal, but has neither commenced an appraisal proceeding or joined an appraisal proceeding as a named party, has the right to withdraw such person's demand in accordance with Section 262 and accept the terms of the merger by delivering a written withdrawal to LENZ. Any withdrawal of a demand for appraisal made more than 60 days after the effective date of the merger may only be made with the written approval of the surviving corporation. If, following a demand for appraisal, a person has withdrawn such person's demand for appraisal in accordance with Section 262, such person will have the right to receive the merger consideration, without interest, for such person's shares of LENZ capital stock. Notwithstanding the foregoing, no appraisal proceeding in the Court shall be dismissed as to any person without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just, including, without limitation, a reservation of jurisdiction (a "Reservation") for any Application (as defined below); provided, however, that the limitation set forth in this sentence shall not affect the right of any person who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such person's demand for appraisal and to accept the terms offered upon the merger within 60 days after the effective date of the merger.

Costs of the appraisal proceeding may be imposed upon the surviving corporation and the parties participating in the appraisal proceeding by the Court as the Court deems equitable in the circumstances. Upon the application of a person whose name appears on the Verified List who participated in the proceeding and incurred expenses in connection therewith (an "Application"), the Court may order all or a portion of the expenses, including, without limitation, reasonable attorneys' fees and the fees and expenses of experts, to be charged pro rata against the value of all shares entitled to appraisal that were not dismissed pursuant to the terms of Section 262 or subject to an award pursuant to a Reservation. In the absence of such a determination or assessment, each party bears its own expenses. Any person who had demanded appraisal rights will not, after the effective time, be entitled to vote shares subject to that demand for any purpose or to receive payments of dividends or any other distribution with respect to those shares, other than with respect to payment as of a record date prior to the effective time.

Failure to follow the steps required by Section 262 for perfecting appraisal rights may result in the loss of appraisal rights. In view of the complexity of Section 262, persons who may wish to dissent from the merger and pursue appraisal rights should consult their legal advisors.

THE MERGER AGREEMENT

The following is a summary of the material terms of the Merger Agreement. A copy of the Merger Agreement is attached to this proxy statement/prospectus as Annex A and is incorporated by reference into this proxy statement/prospectus. The Merger Agreement has been attached to this proxy statement/prospectus to provide you with information regarding its terms. It is not intended to provide any other factual information about Graphite, LENZ or Merger Sub. The following description does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement. You should refer to the full text of the Merger Agreement for details of the merger and the terms and conditions of the Merger Agreement.

The Merger Agreement contains representations and warranties that Graphite and Merger Sub, on the one hand, and LENZ, on the other hand, have made to one another as of specific dates. These representations and warranties have been made for the benefit of the other parties to the Merger Agreement and may be intended not as statements of fact but rather as a way of allocating the risk to one of the parties if those statements prove to be incorrect. In addition, the assertions embodied in the representations and warranties are qualified by information in confidential disclosure schedules exchanged by the parties in connection with signing the Merger Agreement. While Graphite and LENZ do not believe that these disclosure schedules contain information required to be publicly disclosed under the applicable securities laws, other than information that has already been so disclosed, the disclosure schedules do contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the attached Merger Agreement. Accordingly, you should not rely on the representations and warranties as current characterizations of factual information about Graphite or LENZ, because they were made as of specific dates, may be intended merely as a risk allocation mechanism between Graphite, Merger Sub and LENZ and are modified by the disclosure schedules.

Structure

Subject to the terms and conditions of the Merger Agreement, and in accordance with Delaware law, at the completion of the merger, Merger Sub, a wholly owned subsidiary of Graphite, formed by Graphite in connection with the merger, will merge with and into LENZ, with LENZ surviving as a wholly owned subsidiary of Graphite.

Completion and Effectiveness of the Merger

The Merger Agreement requires the parties to consummate the merger as promptly as practicable (and in any event within two business days) after all of the conditions to the consummation of the merger contained in the Merger Agreement are satisfied or waived, including the adoption of the Merger Agreement by the LENZ stockholders and the approval by the Graphite stockholders of the issuance of Graphite common stock and the other transactions proposed under the Merger Agreement, other than those conditions that by their nature are to be satisfied at the closing of the merger. The merger will become effective upon the filing of a certificate of merger with the Secretary of State of the State of Delaware or at such later time as is agreed by Graphite and LENZ and specified in the certificate of merger. Neither Graphite nor LENZ can predict the exact timing of the consummation of the merger.

Substantially concurrently with the completion of the Merger, Graphite will be renamed “LENZ Therapeutics, Inc.” and expects to trade on Nasdaq under the symbol “LENZ”.

Merger Consideration

At the effective time, upon the terms and subject to the conditions set forth in the Merger Agreement, (a) each then-outstanding share of LENZ common stock (excluding shares held as treasury stock and automatically cancelled pursuant to the Merger Agreement and excluding dissenting shares, but including any LENZ restricted shares) will be converted into the right to receive a number of shares of Graphite common stock

equal to the exchange ratio described in more detail below, (b) each then-outstanding share of LENZ preferred stock will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of LENZ common stock into which each share of LENZ preferred stock is then convertible, (c) each then-outstanding LENZ option will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement and (d) each then-outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement.

No fractional shares of Graphite common stock will be issued in connection with the merger, and no certificates or scrip for any such fractional shares will be issued. Any fractional shares of Graphite common stock resulting from the conversion of shares of LENZ common stock (including shares of LENZ common stock issued upon conversion of LENZ preferred stock) shall be rounded down to the nearest whole number, with no cash being paid for any fractional share eliminated by such rounding.

Exchange Ratio

The exchange ratio is calculated using a formula intended to allocate existing Graphite and LENZ stockholders a percentage of the combined company. Based on Graphite's and LENZ's capitalization as of November 9, 2023, the exchange ratio is estimated to be equal to approximately 1.4135. This estimate is subject to adjustment prior to closing for Graphite's net cash at the cash determination time (as defined below) (and as a result, Graphite stockholders could own more, and LENZ stockholders could own less, or vice versa, of the combined company).

Based on the estimates set forth above, with giving effect to the Graphite private placement, assuming a subscription amount of $53.5 million and certain other assumptions, including, but not limited to, Graphite's net cash as of closing being between $115 million and $175 million, immediately following the completion of the merger, existing Graphite stockholders would own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, the investors issued shares of Graphite common stock in the Graphite private placement would own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and LENZ stockholders would own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding, in each case, any additional shares reserved under the 2024 Plan and the 2024 ESPP). For more information on the Graphite private placement, please see the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 in this proxy statement/prospectus.

The exchange ratio formula is the quotient obtained (rounded to four decimal places) by dividing the LENZ value per share (defined below) by the Graphite value per share (defined below), in which:

- "Graphite outstanding shares" means the total number of shares of Graphite common stock outstanding immediately prior to the effective time (including, without limitation, taking into account the effects of the reverse stock split and the termination of the Out-of-the-Money Graphite Options pursuant to the Merger Agreement) calculated using the treasury stock method, assuming the exercise, conversion or exchange of all options, warrants, conversion rights, exchange rights or any other rights to receive shares of Graphite common stock that exist immediately prior to the effective time. For clarity, all outstanding Graphite options shall be included in the total number of shares of Graphite common stock for purposes of determining the Graphite outstanding shares, to the extent not terminated prior to the closing, and no shares issued in connection with the Graphite private placement shall be included in the Graphite outstanding shares.
- "Graphite valuation" means $126,500,000; provided, that if the final Graphite net cash is above or below the Graphite target net cash by more than $1 million, then the Graphite valuation will be adjusted on a dollar-for-dollar basis by the difference of the final Graphite net cash and the Graphite target net cash. In addition, and for the avoidance of doubt, the Graphite valuation assumes the consummation of the special cash dividend in an amount equal to $60 million, and to the extent the

amount of the special cash dividend is modified pursuant to the Merger Agreement or otherwise, shall be automatically adjusted on a dollar-for-dollar basis by the difference of $60 million and the actual amount of the special cash dividend.

- "Graphite value per share" equals the Graphite valuation divided by the number of Graphite outstanding shares.
- "LENZ outstanding shares" means the total number of shares of LENZ capital stock outstanding on a fully diluted basis immediately prior to the effective time, assuming the exercise, conversion and exchange of all options, warrants, conversion rights, exchange rights or any other rights to receive shares of LENZ capital stock which exist immediately prior to the effective time.
- "LENZ valuation" means $231,600,000, provided, however, that if the LENZ valuation implied by the pricing of the Graphite private placement is other than $231,600,000 as agreed by the investors in the Graphite private placement, the "LENZ valuation" will be adjusted on a dollar-for-dollar basis to match such amount.
- "LENZ value per share" equals the LENZ valuation divided by the number of LENZ Outstanding Shares.
- "Graphite target net cash" means $175,000,000 of net cash at closing.
- "Final Graphite net cash" means the Graphite net cash at the close of business on the closing date.

The estimated exchange ratio for purposes of the unaudited pro forma condensed combined financial information was derived on a fully-diluted basis as of November 9, 2023 using a stipulated value of LENZ of approximately $231.6 million and of Graphite of approximately $126.5 million (including the Graphite private placement). For more information, see "*Unaudited Pro Forma Condensed Combined Financial Information*" beginning on page 388 of this proxy statement/prospectus.

Calculation of Graphite's Net Cash

Pursuant to the terms of the Merger Agreement, Graphite's "net cash" means:

- Graphite's cash, cash equivalents and short-term investments; *plus*
- all prepaid expenses, deposits, receivables and restricted cash that Graphite and LENZ mutually agree will be useable by or available to LENZ within 90 days of closing; *minus*
- the sum of Graphite's short-term and long-term liabilities and any unpaid transaction expenses accrued at the closing date (including any costs, fees or other liabilities, including, without limitation, taxes, related to the special cash dividend, the preparation and filing of Graphite's Annual Report on Form 10-K for the fiscal year ended December 31, 2023 (the "Graphite Form 10-K"), including the preparation and audit of the related audited financial statements, the premiums, commissions and other fees paid or payable in connection with obtaining Graphite's D&O tail policy; *minus*
- all payables or obligations, whether absolute, contingent or otherwise, related to Graphite's lease agreements (net of any mitigated lease amounts); *minus*
- to the extent payable in cash at closing and not yet paid, any and all liabilities of Graphite to any of its employees (including change of control payments, retention payments, severance payments and any employer-side portion of any payroll or similar taxes owed in connection with the foregoing or any of Graphite's equity plans); *minus*
- the actual costs, or, to the extent not available as of the cash determination time (as defined below), the mutually agreed estimate for costs associated with the termination of ongoing contractual obligations relating to all of Graphite's material contracts and/or Graphite's legacy business; *minus*
- all actual and reasonably projected costs and expenses relating to the winding down of Graphite's prior research and development activities; *minus*

- any and all liabilities of Graphite resulting from or in connection with the application of Section 280G of the Code in connection with the merger.

No less than ten business days prior to the anticipated closing date, Graphite will deliver to LENZ a net cash schedule setting forth, in reasonable detail, Graphite's good faith, estimated calculation of its net cash as of the close of business on the closing date (the "cash determination time"), prepared and certified by Graphite's chief financial officer (or if there is no chief financial officer at such time, the principal financial and accounting officer). Graphite will make available to LENZ (electronically to the greatest extent possible, as reasonably requested by LENZ, the work papers and back-up materials used or useful in preparing the net cash schedule and, if reasonably requested by LENZ, Graphite's accountants and counsel at reasonable times and upon reasonable notice. Within five business days after delivery of such net cash schedule (the last day of such period referred to as the "response date"), LENZ will have the right to dispute any part of the net cash schedule by delivering a written notice to that effect to Graphite (a "dispute notice"). Any dispute notice will identify, in reasonable detail and, to the extent known, the nature and amounts of any proposed revisions to Graphite's net cash calculation.

If LENZ disputes the net cash schedule, the representatives of Graphite and LENZ will promptly, and in no event later than one day after the response date meet and attempt in good faith to resolve the disputed items and negotiate an agreed-upon determination of net cash. If the parties are unable to negotiate an agreed-upon determination of net cash or any component thereof within two days after the delivery of LENZ's dispute notice, any remaining disagreements will be referred to an independent auditor of recognized national standing mutually agreed upon by Graphite and LENZ. The determination of the amount of net cash made by such auditor shall be final and binding on Graphite and LENZ.

Graphite's net cash balance is subject to numerous factors, some of which are outside of Graphite's control. The actual amount of net cash will depend significantly on the timing of the closing. In addition, the closing could be delayed if Graphite and LENZ are not able to agree upon the amount of Graphite's net cash as of the cash determination time.

Treatment of LENZ Restricted Shares

Under the terms of the Merger Agreement, at the effective time, each award of LENZ restricted shares, will be converted into a number of shares of Graphite common stock equal to the product of (A) the number of shares of LENZ restricted shares, multiplied by (B) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Graphite common stock. Each Graphite common stock so converted will remain subject to the terms and conditions (including, without limitation, vesting and repurchase provisions) of such LENZ restricted shares as of immediately prior to the effective time.

Treatment of LENZ Options

Under the terms of the Merger Agreement, at the effective time, each LENZ option that is outstanding and unexercised immediately prior to the effective time, whether or not vested, will be assumed and converted into a Graphite option. Graphite will assume LENZ's 2020 Equity Incentive Plan.

Accordingly, from and after the effective time: (i) each LENZ option assumed by Graphite may be exercised solely for shares of Graphite common stock, (ii) the number of shares of Graphite common stock subject to each LENZ option assumed by Graphite shall be determined by multiplying (A) the number of shares of LENZ common stock that were subject to such LENZ option, as in effect immediately prior to the effective time, by (B) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Graphite common stock, (iii) the per share exercise price for the Graphite common stock issuable upon exercise of each LENZ option assumed by Graphite shall be determined by dividing (A) the per share exercise price of LENZ common stock subject to such LENZ option, as in effect immediately prior to the effective time, by (B) the exchange ratio and rounding the resulting exercise price up to the nearest whole cent and (iv) any

restriction on the exercise of any LENZ option assumed by Graphite shall continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such LENZ option shall otherwise remain unchanged.

However, the Graphite board of directors or a committee thereof will succeed to the authority and responsibility of the LENZ board of directors or any committee thereof with respect to each LENZ option assumed by Graphite in accordance with the terms of the Merger Agreement.

Treatment of LENZ Warrants

Under the terms of the Merger Agreement, each warrant to purchase shares of LENZ capital stock that is outstanding and unexercised immediately prior to the effective time (that shall not terminate per its own terms upon the effective time) will be assumed and converted into a warrant to purchase shares of Graphite common stock.

Accordingly, from and after the effective time: (i) each outstanding LENZ warrant assumed by Graphite may be exercised solely for shares of Graphite common stock; (ii) the number of shares of Graphite common stock subject to each outstanding LENZ warrant assumed by Graphite will be determined by multiplying (A) the number of shares of LENZ common stock, or the number of shares of LENZ common stock issuable upon conversion of LENZ preferred stock, subject to the unexercised portion of the LENZ warrant immediately prior to the effective time, by (B) the exchange ratio, and rounding the resulting number down to the nearest whole number of shares of Graphite common stock; and (iii) the per share exercise price for the Graphite common stock issuable upon exercise of each LENZ warrant assumed by Graphite will be determined by dividing (A) the per share exercise price of Graphite common stock subject to such LENZ warrant as in effect immediately prior to the effective time, by (B) the exchange ratio and rounding the resulting exercise price up to the nearest whole cent. Each LENZ warrant assumed by Graphite will otherwise continue in full force and effect and the term, any restriction on the exercise and other provisions of such LENZ warrant will otherwise remain unchanged.

However, to the extent provided under the terms of a LENZ warrant assumed by Graphite in accordance with the terms of the Merger Agreement, such LENZ warrant shall, in accordance with its terms, be subject to further adjustment as appropriate to reflect any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification, recapitalization or other similar transaction with respect to shares of Graphite common stock subsequent to the effective time. In addition, the Graphite board of directors or a committee thereof will succeed to the authority and responsibility of the LENZ board of directors or any committee thereof with respect to each LENZ warrant assumed by Graphite in accordance with the terms of the Merger Agreement.

Treatment of Graphite Common Stock and Graphite Options

Each share of Graphite common stock issued and outstanding at the time of the merger will remain issued and outstanding. In addition, each Graphite option that is outstanding immediately prior to the effective time, whether vested or unvested, will survive the closing and remain outstanding in accordance with its terms, provided that (i) each Out-of-the-Money Graphite Option shall be accelerated in full immediately prior to the effective time, and each such Out-of-the-Money Graphite Option not exercised as of immediately prior to the effective time shall be cancelled at the effective time for no consideration, and (ii) each Graphite option that has an exercise price per share less than $3.00, is unexpired and unexercised as of the effective time, shall continue to be subject to the same terms and conditions after the effective time as were applicable to such Graphite option immediately prior to the effective time.

Immediately after the merger, Graphite securityholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of Graphite common stock, subject to certain

assumptions, including, but not limited to, Graphite's net cash as of closing being between $115 million and $175 million. For more information on the impact of the Graphite private placement, please see the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 of this proxy statement/prospectus.

Amendment of the Amended and Restated Certificate of Incorporation of Graphite

Graphite agreed to amend its amended and restated certificate of incorporation to (i) effect the proposed reverse stock split and (ii) change Graphite's name to "LENZ Therapeutics, Inc.".

Representations and Warranties

The Merger Agreement contains customary representations and warranties of Graphite and LENZ for a transaction of this type relating to, among other things:

- corporate organization and power, and similar corporate matters;
- capitalization;
- subsidiaries;
- votes required for completion of the merger and approval of the proposals that will come before the stockholders at the Graphite special meeting and that will be the subject of the LENZ stockholder approval;
- authority to enter into the Merger Agreement and the related agreements;
- except as otherwise specifically disclosed in the Merger Agreement, the fact that the consummation of the merger would not contravene the organizational documents, certain laws, governmental authorizations or certain contracts of the parties; result in any encumbrances on the parties' assets or require the consent of any third party;
- financial statements and, with respect to Graphite, documents filed with the SEC and the accuracy of information contained in those documents;
- liabilities;
- material changes or events;
- legal proceedings and orders;
- regulatory compliance, permits and restrictions;
- employee and labor matters and benefit plans;
- environmental matters;
- tax matters;
- the validity of material contracts to which the parties or their subsidiaries are a party and any violation, default or breach of such contracts;
- insurance;
- real property and leaseholds;
- intellectual property;
- the parties' efforts with respect to ensuring the inapplicability of Section 203 of the DGCL;
- financial advisors fees;
- certain transactions or relationships with affiliates;

- with respect to Graphite, the opinion of its financial advisor;
- with respect to Graphite, the valid issuance in the merger of Graphite common stock; and
- the private placement agreement.

The representations and warranties are, in many respects, qualified by materiality and knowledge, and will not survive the merger, but their accuracy forms the basis of one of the conditions to the obligations of Graphite and LENZ to complete the merger.

Covenants; Conduct of Business Pending the Merger

Graphite has agreed that, except as permitted by the Merger Agreement, as required by law, or unless LENZ has provided written consent, during the period commencing on the date of the Merger Agreement and continuing until the earlier to occur of the effective time and the termination of the Merger Agreement, Graphite and its subsidiaries will use commercially reasonable efforts to conduct their business and operations in the ordinary course consistent with past practices and in material compliance with all applicable laws, regulations and certain contracts and shall use reasonable best efforts to file Graphite's 10-K Annual Report on Form 10-K for the fiscal year ended December 31, 2023, including all required audited financial statements in connection therewith. Graphite has also agreed that, subject to certain limited exceptions, without the consent of LENZ, it will not, and will not cause or permit any of its subsidiaries to, during the period commencing on the date of the Merger Agreement and continuing until the earlier to occur of the effective time and the termination of the Merger Agreement:

- other than the special cash dividend, declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities (except for shares of Graphite common stock from terminated employees, directors or consultants of Graphite in accordance with agreements in effect on the date of the Merger Agreement providing for the repurchase of shares at no more than the purchase price thereof in connection with any termination of services to Graphite);
- sell, issue, grant, pledge or otherwise dispose of or encumber or authorize the issuance of any capital stock or other security (except for Graphite common stock issued upon the valid exercise or settlement of outstanding Graphite options or Graphite restricted stock awards as applicable), any option, warrant or right to acquire any capital stock or any other security or any instrument convertible into or exchangeable for any capital stock or other security;
- except as required to give effect to anything in contemplation of the closing, amend any of its organizational documents, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the transactions contemplated by the Merger Agreement;
- form any subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;
- lend money to any person (other than routine advances to employees of Graphite or its subsidiaries in the ordinary course of business and consistent with past practice, pursuant to Graphite's equity award plans), incur or guarantee any indebtedness for borrowed money, guarantee any debt securities of others or make any capital expenditure or commitment;
- other than as required by applicable law or the terms of Graphite's equity award plans in effect as of the date of the Merger Agreement, adopt, establish or enter into any equity award plan, cause or permit any Graphite equity award plan to be amended other than as required by law or in order to make amendments for the purposes of Section 409A of the Code, pay any bonus or make any profit-sharing or similar payment to, or increase the amount of the wages, salary, commissions, fringe benefits or

other compensation or remuneration payable to, any of its employees, directors or consultants, increase the severance or change of control benefits offered to any current or new employees, directors or consultants, or hire any officer, employee or consultant;

- enter into any material transaction outside the ordinary course of business consistent with past practice;
- acquire any material asset or sell, lease, license or otherwise irrevocably dispose of any of its assets or properties, or grant any lien with respect to such assets or properties;
- make (other than consistent with past practice), change or revoke any material tax election; file any material amendment to any tax return; settle or compromise any material tax claim; waive or extend any statute of limitations in respect of a period within which an assessment or reassessment of material taxes may be issued (other than any extension pursuant to an extension to file any tax return); enter into any "closing agreement" as described in Section 7121 of the Code (or any similar law) with any governmental entity; or adopt or change any material accounting method in respect of taxes;
- waive, settle or compromise any pending or threatened action against Graphite or any of its subsidiaries;
- delay or fail to repay when due any material obligation, including accounts payable and accrued expenses, other than in the ordinary course of business and consistent with past practice;
- forgive any loans to any person, including its employees, officers, directors or affiliate;
- sell, assign, transfer, license, sublicense or otherwise dispose of any material registered intellectual property;
- terminate or modify in any material respect, or fail to exercise renewal rights with respect to, any material insurance policy;
- enter into, amend, terminate, or waive any material option or right under, any Graphite material contract;
- enter into any agreement to purchase or sell any interest in real property, grant any security interest in any real property, enter into any lease, sublease, license or other occupancy agreement with respect to any real property or alter, amend, modify, exercise any extension or expansion right under or violate or terminate any of the terms of any Graphite lease agreements, sublease agreements or lease mitigation agreements;
- materially change pricing or royalties or other payments set or charged by Graphite or any of its subsidiaries to its customers or licensees, or agree to materially change pricing or royalties or other payments set or charged by persons who have licensed intellectual property to Graphite or any of its subsidiaries;
- other than as required by law or GAAP, take any action to change accounting policies or procedures; or
- agree, resolve or commit to do any of the foregoing.

LENZ has agreed that, except as permitted by the Merger Agreement, as required by law, or unless Graphite shall have provided written consent, during the period commencing on the date of the Merger Agreement and continuing until the earlier to occur of the effective time and the termination of the Merger Agreement, LENZ will use commercially reasonable efforts to conduct its business and operations in the ordinary course consistent with past practices and in material compliance with all applicable laws, regulations and certain contracts. LENZ has also agreed that, subject to certain limited exceptions, without the consent of Graphite, it will not, and will not cause or permit its subsidiary to, during the period commencing on the date of the Merger Agreement and continuing until the earlier to occur of the effective time and the termination of the Merger Agreement:

- declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other

securities (except for shares of LENZ capital stock from terminated employees, directors or consultants of LENZ in accordance with agreements in effect on the date of the Merger Agreement providing for the repurchase of shares at no more than the purchase price thereof in connection with any termination of services to LENZ);

- sell, issue, grant, pledge or otherwise dispose of or encumber or authorize the issuance of: any capital stock or other security (except for LENZ capital stock issued upon the valid exercise or settlement of outstanding LENZ options), (B) any option, warrant or right to acquire any capital stock or any other security or (C) any instrument convertible into or exchangeable for any capital stock or other security (other than the grant of LENZ options under the LENZ 2020 Equity Plan in the ordinary course of business and consistent with past practice);
- except as required to give effect to anything in contemplation of the closing, amend any of its organizational documents, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the transactions contemplated by the Merger Agreement;
- form any subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;
- lend money to any person (other than routine advances to employees of LENZ in the ordinary course of business and consistent with past practice, pursuant to LENZ equity award plans), incur or guarantee any material indebtedness for borrowed money, guarantee any debt securities of others or make any material capital expenditure or commitment;
- enter into any material transaction for more than $1,500,000 in excess of the amount provided for LENZ's forecasted operating budget;
- other than in the ordinary course of business or as contemplated by LENZ's forecasted operating budget, acquire any material asset or sell, lease, license or otherwise irrevocably dispose of any of its material assets or properties, or grant any lien with respect to such assets or properties;
- make (other than consistent with past practice), change or revoke any material tax election; file any material amendment to any tax return; settle or compromise any material tax claim; waive or extend any statute of limitations in respect of a period within which an assessment or reassessment of material taxes may be issued (other than any extension pursuant to an extension to file any tax return); enter into any "closing agreement" as described in Section 7121 of the Code (or any similar law) with any governmental entity; or adopt or change any material accounting method in respect of taxes;
- waive, settle or compromise any pending or threatened action against LENZ, other than waivers, settlements or agreements for an amount not in excess of $500,000 in the aggregate (excluding amounts to be paid under existing insurance policies or renewals thereof) and that do not impose any material restrictions on the operations or businesses of LENZ, taken as a whole, or any equitable relief on, or the admission of wrongdoing by LENZ;
- delay or fail to repay when due any material obligation, including accounts payable and accrued expenses, other than in the ordinary course of business and consistent with past practice;
- forgive any material loans to any person, including its employees, officers, directors or affiliate;
- sell, assign, transfer, license, sublicense or otherwise dispose of any material intellectual property of LENZ (other than in the ordinary course of business and consistent with past practice);
- terminate or modify in any material respect, or fail to exercise renewal rights with respect to, any material insurance policy, in each case, without obtaining commercially reasonable alternatives;
- other than in the ordinary course of business, materially change pricing or royalties or other payments set or charged by LENZ to its customers or licensees, or agree to materially change pricing or royalties or other payments set or charged by persons who have licensed intellectual property to LENZ; or

- agree, resolve or commit to do any of the foregoing.

Non-Solicitation

Each of Graphite and LENZ have agreed that, except as described below, Graphite and LENZ and any of their respective subsidiaries will not, nor will either party or any of its subsidiaries authorize any of the directors, officers, employees, attorneys, accountants, investment bankers, financial advisors or other advisors, agents or representatives retained by it or any of its subsidiaries to, directly or indirectly:

- solicit, initiate or knowingly encourage, induce or facilitate the communication, making, submission or announcement of, any Acquisition Proposal or Acquisition Inquiry or take any action that could reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry;
- furnish any non-public information with respect to it to any person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry;
- engage in discussions or negotiations with any person with respect to any Acquisition Proposal or Acquisition Inquiry;
- approve, endorse or recommend an Acquisition Proposal (subject to certain exceptions);
- execute or enter into any letter of intent or any contract contemplating or otherwise relating to an Acquisition Transaction;
- take any action that could reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry; or
- publicly propose to do any of the foregoing.

An "Acquisition Inquiry" means, with respect to a party, an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made or submitted by LENZ, on the one hand, or Graphite, on the other hand, to the other party) that could reasonably be expected to lead to an Acquisition Proposal, other than the Graphite private placement or a Permitted Financing (as defined below).

An "Acquisition Proposal" means with respect to either Graphite or LENZ, any proposal or offer from any person (other than Graphite or LENZ, as applicable, or their respective representatives) providing for (i) the acquisition or purchase by such person from a party of a substantial portion of such party's or any of its subsidiaries' capital stock or material assets or (ii) any merger, consolidation, recapitalization or other business combination transaction involving such party (other than in connection with the Graphite private placement, a Permitted Financing, Graphite's leases, a transaction with respect to Graphite's legacy business or the exercise or repurchase of existing equity interests).

An "Acquisition Transaction" means any transaction or series of related transactions (other than the Graphite private placement or a Permitted Financing) involving:

- any merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction: (i) in which a party is a constituent entity, (ii) in which a person or "group" (as defined in the Exchange Act and the rules promulgated thereunder) of persons directly or indirectly acquires beneficial or record ownership of securities representing more than 20% of the outstanding securities of any class of voting securities of a party or any of its subsidiaries or (iii) in which a party or any of its subsidiaries issues securities representing more than 20% of the outstanding securities of any class of voting securities of such party or any of its subsidiaries; or
- any sale, lease, exchange, transfer, license, acquisition or disposition of any business or businesses or assets that constitute or account for 20% or more of the consolidated book value of the fair market value of the assets of a party and its subsidiaries, taken as a whole.

Notwithstanding the foregoing, before obtaining the applicable approvals of the Graphite stockholders required to consummate the merger, Graphite may furnish non-public information regarding Graphite and its subsidiaries to, and enter into discussions or negotiations with, any third party in response to a bona fide written Acquisition Proposal by such third party, which the Graphite board of directors determines in good faith, after consultation with Graphite's financial advisors and outside legal counsel, constitutes or is reasonably likely to result in a Superior Offer (and is not withdrawn), if:

- neither Graphite nor any of its representative has breached the non-solicitation provisions of the Merger Agreement described above in any material respect;
- the Graphite board of directors concludes in good faith, after consulting with outside counsel, that the failure to take such action would reasonably be expected to constitute a violation of the Graphite board of directors' fiduciary duties under applicable law; and
- at least one business day prior to furnishing any non-public information or entering into discussions with a third party, Graphite receives from the third party an executed confidentiality agreement containing provisions at least as favorable to such party as those contained in the confidentiality agreement between Graphite and LENZ and Graphite furnishes such non-public information to LENZ (to the extent such information has not been previously furnished by Graphite to LENZ).

A "Superior Offer" means an unsolicited bona fide written Acquisition Proposal (with all references to 20% in the definition of Acquisition Transaction being treated as references to 50% for these purposes) that: (a) was not obtained or made as a direct or indirect result of a breach of (or in violation of) the Merger Agreement and (b) is on terms and conditions that the Graphite board of directors or the LENZ board of directors, as applicable, determines in good faith, based on such matters that it deems relevant (including the likelihood of consummation thereof and the financing terms thereof), as well as any written offer by the other party to the Merger Agreement to amend the terms of the Merger Agreement, and following consultation with its outside legal counsel and financial advisors, if any, are more favorable, from a financial point of view, to the Graphite stockholders or LENZ stockholders, as applicable, than the terms of the transactions contemplated hereby.

The Merger Agreement also provides that each party will promptly (and in no event later than one business day after such party becomes aware of such Acquisition Proposal or Acquisition Inquiry) advise the other party of the status and terms of, and keep the other party reasonably informed with respect to, any Acquisition Proposal or Acquisition Inquiry and any material modification or material proposed modification thereto.

Notwithstanding the foregoing, LENZ and Graphite have agreed that Graphite will, upon the request of LENZ and subject to applicable law, execute stock purchase agreements (each a "Permitted Financing") that are substantially in the form of the Subscription Agreement, unless otherwise agreed by LENZ and Graphite. To the extent any Permitted Financing is conducted or consummated by Graphite, it will be considered as part of the Graphite private placement for all purposes under the Merger Agreement.

Board Recommendation Change

Under the Merger Agreement, subject to certain exceptions described below, Graphite agreed that its board of directors may not make a Graphite board recommendation change.

However, notwithstanding the foregoing, at any time prior to the approval of the proposals to be considered at the Graphite special meeting by the necessary vote of Graphite stockholders, if (x) Graphite has received a bona fide written Superior Offer or (y) there is a Graphite intervening event, the Graphite board of directors may make a Graphite board recommendation change if, but only if,

(i) in the case of a Superior Offer, following the receipt of and on account of such Superior Offer:

- the Graphite board of directors determines in good faith, after consulting with outside legal counsel, that the failure to withhold, amend, withdraw or modify such recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable law;

- Graphite has, and has caused its financial advisors and outside legal counsel to, during the four business days prior to the Graphite board recommendation change (the "Graphite notice period"), negotiate with LENZ in good faith to make such adjustments to the terms and conditions of the Merger Agreement so that such Acquisition Proposal ceases to constitute a Superior Offer (to the extent LENZ desires to negotiate); and
- if after LENZ has delivered to Graphite an irrevocable written offer to alter the terms or conditions of the Merger Agreement during the Graphite notice period, the Graphite board of directors shall have determined in good faith, based on the advice of its outside legal counsel, that the failure to withhold, amend, withdraw or modify the Graphite board recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable law (after taking into account such alterations of the terms and conditions of the Merger Agreement); *provided* that (x) LENZ receives written notice from Graphite confirming that the Graphite board of directors has determined to change its recommendation in compliance with the Graphite notice period, which notice shall include a description in reasonable detail of the reasons for such Graphite board recommendation change, and written copies of any relevant proposed transaction agreements with any party making a potential Superior Offer, (y) during any Graphite notice period, LENZ shall be entitled to deliver to Graphite one or more counterproposals to such Acquisition Proposal and Graphite will, and cause its representatives to, negotiate with LENZ in good faith (to the extent LENZ desires to negotiate) to make such adjustments in the terms and conditions of the Merger Agreement so that the applicable Acquisition Proposal ceases to constitute a Superior Offer and (z) in the event of any material amendment to any Superior Offer (including any revision in the amount, form or mix of consideration or percentage of the combined company that Graphite's stockholders would receive as a result of such potential Superior Offer), Graphite shall be required to provide LENZ with notice of such material amendment and the Graphite notice period shall be extended, if applicable, to ensure that at least two business days remain in the Graphite notice period following such notification during which the parties shall comply again with the requirements described above, and the Graphite board of directors shall not make a Graphite board recommendation change prior to the end of such Graphite notice period as so extended (it being understood that there may be multiple extensions) or

(ii) in the case of a Graphite intervening event, Graphite promptly notifies LENZ, in writing, within the Graphite notice period before making a Graphite board recommendation change, which notice shall state expressly the material facts and circumstances related to the applicable Graphite intervening event and that the Graphite board of directors intends to make a Graphite board recommendation change.

A "Graphite intervening event" means a material development or change in circumstances (other than any such event, development or change to the extent related to (A) any Acquisition Proposal, Acquisition Inquiry, Acquisition Transaction or the consequence thereof or (B) the fact, in and of itself, that Graphite meets or exceeds internal budgets, plans or forecasts of its revenues, earnings or other financial performance or results of operations) that affects the business, assets or operations of Graphite that occurs or arises after the date of the Merger Agreement.

Graphite's obligation to call, give notice and hold the Graphite special meeting is not limited to or otherwise affected by the commencement, disclosure, announcement or submission of any Superior Offer or Acquisition Proposal, or by any withdrawal or modification of the Graphite board of directors recommendation or any Graphite board recommendation change.

Under the Merger Agreement, subject to certain exceptions described below, LENZ agreed that its board of directors may not withhold, amend, withdraw or modify (or publicly propose to withhold, amend, withdraw or modify) the recommendation of the LENZ board of directors in a manner adverse to Graphite (referred to in this proxy statement/prospectus as a LENZ board recommendation change).

However, notwithstanding the foregoing, at any time prior to the approval and adoption of the Merger Agreement by the necessary vote of LENZ stockholders, if (x) LENZ has received a bona fide written Superior

Offer or (y) there is a LENZ intervening event, the LENZ board of directors may make a LENZ board recommendation change if, but only if, but only if:

(i) in the case of a Superior Offer, following the receipt of and on account of such Superior Offer:

- the LENZ board of directors determines in good faith, after consulting with outside legal counsel, that the failure to withhold, amend, withdraw or modify such recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable law;
- LENZ has, and has caused its financial advisors and outside legal counsel to, during the four business days prior to the LENZ board recommendation change (the "LENZ notice period"), negotiate with Graphite in good faith to make such adjustments to the terms and conditions of the Merger Agreement so that such Acquisition Proposal ceases to constitute a Superior Offer (to the extent Graphite desires to negotiate); and
- if after Graphite shall have delivered to LENZ an irrevocable written offer to alter the terms or conditions of the Merger Agreement during the LENZ notice period, the LENZ board of directors shall have determined in good faith, based on the advice of its outside legal counsel, that the failure to withhold, amend, withdraw or modify the LENZ board recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law (after taking into account such alterations of the terms and conditions of the Merger Agreement); *provided* that (x) Graphite receives written notice from LENZ confirming that the LENZ board of directors has determined to change its recommendation in compliance with the LENZ notice period, which notice shall include a description in reasonable detail of the reasons for such LENZ board recommendation change, and written copies of any relevant proposed transaction agreements with any party making a potential Superior Offer, (y) during any LENZ notice period, Graphite shall be entitled to deliver to LENZ one or more counterproposals to such Acquisition Proposal and LENZ will, and cause its representatives to, negotiate with Graphite in good faith (to the extent Graphite desires to negotiate) to make such adjustments in the terms and conditions of the Merger Agreement so that the applicable Acquisition Proposal ceases to constitute a Superior Offer and (z) in the event of any material amendment to any Superior Offer (including any revision in the amount, form or mix of consideration or percentage of the combined company that LENZ stockholders would receive as a result of such potential Superior Offer), LENZ shall be required to provide Graphite with notice of such material amendment and the LENZ notice period shall be extended, if applicable, to ensure that at least two business days remain in the LENZ notice period following such notification during which the parties shall comply again with the requirements described above, and the LENZ board of directors shall not make a LENZ board recommendation change prior to the end of such LENZ notice period as so extended (it being understood that there may be multiple extensions); or

(ii) in the case of a LENZ intervening event"), LENZ promptly notifies Graphite, in writing, within the LENZ notice period before making a LENZ board recommendation change, which notice shall state expressly the material facts and circumstances related to the applicable LENZ intervening event and that the LENZ board of directors intends to make a LENZ board recommendation change.

A "LENZ intervening event" means a material development or change in circumstances (other than any such event, development or change to the extent related to (A) any Acquisition Proposal, Acquisition Inquiry, Acquisition Transaction or the consequences thereof or (B) the fact, in and of itself, that LENZ meets or exceeds internal budgets, plans or forecasts of its revenues, earnings or other financial performance or results of operations) that affects the business, assets or operations of LENZ that occurs or arises after the date of the Merger Agreement.

Required Stockholder Approvals

Graphite is obligated under the Merger Agreement to take all action necessary under applicable law to call, give notice of and hold a meeting of the holders of Graphite common stock for the purpose of considering and voting to approve the Merger Agreement and the transactions contemplated thereby (including the merger, the

Nasdaq Stock Issuance Proposal, the Charter Amendment Proposal, the 2024 Plan Proposal and the ESPP Proposal) and such other proposals that Graphite and LENZ may mutually agree upon. The Graphite special meeting will be held as promptly as practicable after the registration statement on Form S-4 is declared effective under the Securities Act, and in any event no later than 45 days after the effective date of the registration statement on Form S-4.

Promptly after the registration statement on Form S-4 has been declared effective, and the prospectus related thereto has been filed and distributed, and no later than two business days thereafter, LENZ is required to solicit approval by written consent from holders of (i) at least a majority of the voting power of outstanding shares of LENZ capital stock, (ii) at least a majority of the outstanding shares of LENZ preferred stock and (iii) at least a majority of the outstanding shares of LENZ's Series B preferred stock, in each case, to approve and adopt the Merger Agreement (the "LENZ stockholder approval"). Reasonably promptly following receipt of such consents, LENZ will prepare, and cause to be mailed to its stockholders who did not execute such consents, a notice in accordance with the DGCL.

Regulatory Approvals

Each party shall use commercially reasonable efforts to make or cause to be made, as promptly as practicable and in any event no more than five business days after the date of the Merger Agreement, any filings required of each of them or any of their respective affiliates under the HSR Act, and all filings and other submissions (if any) and give all notices (if any) required to be made and given by such party in connection with the transactions contemplated by the Merger Agreement. Each party shall further (i) use commercially reasonable efforts to obtain each consent (if any) reasonably required to be obtained (pursuant to any applicable law or contract, or otherwise) by such party in connection with the transactions contemplated by the Merger Agreement or for such contract to remain in full force and effect, (ii) use commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the transactions contemplated by the Merger Agreement and (iii) use commercially reasonable efforts to file or otherwise submit, as soon as practicable after the date of the Merger Agreement, all applications, notices, reports and other documents reasonably required to be filed by such party with or otherwise submitted by such party to any governmental entity with respect to the transactions contemplated hereby, and to submit promptly any additional information requested by any such governmental entity.

Directors and Officers of Graphite Following the Merger

Pursuant to the Merger Agreement, each of the directors and officers of Graphite who will not continue as directors or officers of Graphite following the consummation of the merger will resign effective as of the closing. Effective as of the effective time, the Graphite board of directors will consist of a total of seven directors, two of whom will be designated by Graphite and five of whom will be designated by LENZ. Graphite has designated Kimberlee C. Drapkin and Jeff George to serve as members of the combined company board of directors and LENZ has designated Evert Schimmelpennink, Frederic Guerard, Shelley Thunen, James McCollum and Zach Scheiner to serve as members of the combined company board of directors.

In addition, upon the closing of the merger, Evert Schimmelpennink will serve as Chief Executive Officer and President, Shawn Olsson will serve as Chief Commercial Officer, and Marc Odrich will serve as Chief Medical Officer.

Indemnification and Insurance for Directors and Officers

Under the Merger Agreement, from the effective time through the sixth anniversary of the date on which the effective time occurs, Graphite and the surviving corporation in the merger agreed to indemnify and hold harmless each person who is now, or has been at any time prior to the date of the Merger Agreement, or who becomes prior to the effective time, a director or officer of Graphite or LENZ, respectively, against all claims, losses, liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys' fees and disbursements, incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to the fact that the indemnified officer or director is or was a director or officer of Graphite or of LENZ, whether asserted or claimed prior to, at or after

the effective time, in each case, to the fullest extent permitted under the DGCL. From and after the effective time, Graphite and the surviving corporation in the merger will also fulfill Graphite's and LENZ's indemnity obligations, respectively, to each person who is, has been, or who becomes prior to the effective time, a director or officer of Graphite or LENZ, respectively.

The Merger Agreement also provides that the provisions of the Graphite charter and bylaws with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of Graphite that are presently set forth in the Graphite charter and bylaws will not be amended modified or repealed for a period of six years from the effective time in a manner that would adversely affect the rights thereunder of individuals who, at or prior to the effective time, were officers or directors of Graphite, unless such modification is required by applicable law. The certificate of incorporation and bylaws of the surviving corporation will contain, and Graphite will cause the certificate of incorporation and bylaws of the surviving corporation to so contain, provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers as those presently set forth in the Graphite charter and bylaws.

From and after the effective time, Graphite will maintain director and officers' liability insurance policies, with an effective date as of the closing date, on commercially available terms and conditions and with coverage limits customary for U.S. public companies similarly situated to Graphite. In addition, Graphite will secure and purchase a six year "tail policy" on Graphite's existing directors' and officers' liability insurance policy with an effective date as of the date of the closing.

Closing Cash Dividend

Graphite shall declare a special cash dividend to the holders of record of outstanding shares of Graphite common stock as of a record date prior to the effective time of the merger, to be determined by the Graphite board of directors, to be determined by the Graphite board of directors, which shall be implemented and performed such that Graphite's net cash, after taking into account such special cash dividend, shall be no less than $115 million as of the closing. Subject to such adjustment, and as set forth in the Merger Agreement, the special cash dividend shall be equal to $60 million in the aggregate. The ex-dividend date in respect of such special cash dividend (i.e. the date on which shares of Graphite common stock shall trade without the right to receive the special cash dividend) will be determined by Nasdaq. Graphite stockholders of record who continue to hold their eligible shares of Graphite common stock until market open on the ex-dividend date will be entitled to payment of the special cash dividend. Graphite expects the special cash dividend to be paid to Graphite stockholders of record entitled to receive the special cash dividend prior to the closing.

Additional Agreements

Each of Graphite and LENZ has agreed to use its reasonable best efforts to cause to be taken all actions necessary to consummate the merger and the other transactions contemplated by the Merger Agreement. In connection therewith, each party has agreed to:

- make all filings and other submissions (if any) and give all notices (if any) required to be made and given by such party in connection with the transactions contemplated by the Merger Agreement;
- use commercially reasonable efforts to obtain each consent (if any) reasonably required to be obtained (pursuant to any applicable law or contract, or otherwise) by such party in connection with the transactions contemplated by the Merger Agreement or for such contract to remain in full force and effect;
- use commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the transactions contemplated by the Merger Agreement; and
- use commercially reasonable efforts to satisfy the conditions precedent to the consummation of the Merger Agreement.

Pursuant to the Merger Agreement, Graphite and LENZ have further agreed that:

- each party shall use commercially reasonable efforts to file or otherwise submit, as soon as practicable after the date of the Merger Agreement, all applications, notices, reports and other documents reasonably required to be filed by such party with or otherwise submitted by such party to any governmental entity with respect to the transactions contemplated thereby, and to submit promptly any additional information requested by any such governmental entity.
- Graphite shall give LENZ prompt (but no later than within two business days) written notice of any litigation threatened or in writing against Graphite and/or its directors relating to the Merger Agreement or the transactions contemplated thereby (the "transaction litigation") (including by providing copies of all pleadings with respect thereto) and keep LENZ reasonably informed with respect to the status thereof. Graphite will (i) give LENZ the opportunity to participate in the defense, settlement or prosecution of any transaction litigation, (ii) consult with LENZ with respect to the defense, settlement and prosecution of any transaction litigation, (iii) consider in good faith LENZ's advice with respect to such transaction litigation, and (iv) not settle or consent or agree to settle or compromise any transaction litigation without LENZ's prior written consent (which such consent shall not be unreasonably withheld or delayed).

Conditions to the Completion of the Merger

The following contains a description of all material conditions to the completion of the merger.

Each party's obligation to complete the merger is subject to the satisfaction or, to the extent permitted by applicable law, the written waiver by each of the parties, at or prior to the closing, of various conditions, which include the following:

- the registration statement on Form S-4, of which this proxy statement/prospectus is a part, shall have become effective in accordance with the provisions of the Securities Act, and shall not be subject to any stop order or proceeding seeking a stop order with respect to the registration statement and has not been withdrawn;
- any applicable waiting periods (or any extensions thereof) under the HSR Act shall have expired or otherwise been terminated;
- no temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the transactions contemplated by the Merger Agreement shall have been issued by any court of competent jurisdiction or other governmental entity of competent jurisdiction and remain in effect and there shall not be any law that has the effect of making the consummation of the transactions contemplated by the Merger Agreement illegal;
- LENZ shall have obtained the LENZ stockholder approval;
- Graphite shall have obtained the Graphite stockholder approval of the Graphite stockholders for each of the Nasdaq Stock Issuance Proposal, the Charter Amendment Proposal, the 2024 Plan Proposal and the 2024 ESPP Proposal (the "Graphite stockholder approval");
- the Subscription Agreement evidencing the Graphite private placement shall be in full force and effect and cash proceeds of not less than $50,000,000 (in combination with any proceeds from a Permitted Financing), which gross proceeds will be received by the surviving corporation immediately prior to or following the closing in connection with the consummation of the transactions contemplated by the Subscription Agreement or any Permitted Financing;
- the lock-up agreements executed by certain stockholders of LENZ and Graphite will continue to be in full force and effect as of immediately following the effective time; and
- the approval of the listing of the additional shares pursuant to the Nasdaq Listing Application shall have been approved for listing (subject to official notice of issuance) on Nasdaq, and Graphite shall have maintained its existing listing on Nasdaq and obtained approval of the listing of the combined corporation on Nasdaq.

In addition, the obligation of Graphite and Merger Sub to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- the representations and warranties regarding certain matters, including matters related to organization, organizational documents, authority, vote required and financial advisors of LENZ in the Merger Agreement must be true and correct in all respects on the date of the Merger Agreement and on the closing date with the same force and effect as if made on the closing date except for (a) in respect of certain capitalization matters of LENZ in the Merger Agreement, for such inaccuracies which are de minimis in the aggregate, and (b) those representations and warranties which address matters only as of a particular date, which representations and warranties shall be true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date;
- the remaining representations and warranties of LENZ in the Merger Agreement must be true and correct in all respects on the date of the Merger Agreement and on the closing date with the same force and effect as if made on the closing date except (a) in each case, or in the aggregate, where the failure to be so true and correct would not reasonably be expect to have a material adverse effect on LENZ (without giving effect to any references therein to materiality qualifications) or (b) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date);
- LENZ shall have performed or complied with in all material respects all agreement and covenants required to be performed or complied with by it under the Merger Agreement at or prior to the effective time;
- Graphite shall have received certain customary documentation and certifications from LENZ; and
- since the date of the Merger Agreement, there shall have been no event, change, circumstance, occurrence, effect or state of facts that is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, results of operations of LENZ, taken as a whole; *provided*, however, that any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from the following shall not be included: (1) changes or conditions generally affecting the industries in which LENZ operates, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or law or other action by any governmental entity in response thereto, (3) changes in law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of the Merger Agreement, (5) any failure to meet internal or other estimates, predictions, projections or forecasts (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded), or (6) any specific action taken (or omitted to be taken) by LENZ at or with the express written consent of Graphite or required by or expressly permitted by the terms of the Merger Agreement; *provided*, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts shall be excluded only to the extent it is not disproportionately adverse to LENZ as compared to other participants in the industries in which LENZ operates.

In addition, the obligation of LENZ to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- the representations and warranties regarding certain matters, including matters related to organization, organizational documents, authority, vote required and financial advisors of Graphite in the Merger Agreement must be true and correct in all respects on the date of the Merger Agreement and on the closing date with the same force and effect as if made on the closing date except for (a) in respect of

certain capitalization matters of Graphite in the Merger Agreement, for such inaccuracies which are de minimis in the aggregate, and (b) those representations and warranties which address matters only as of a particular date, which representations and warranties shall be true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date;

- the remaining representations and warranties of Graphite in the Merger Agreement must be true and correct in all respects on the date of the Merger Agreement and on the closing date with the same force and effect as if made on the closing date except (a) in each case, or in the aggregate, where the failure to be so true and correct would not reasonably be expect to have a material adverse effect on Graphite (without giving effect to any references therein to materiality qualifications) or (b) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date);
- Graphite shall have performed or complied with in all material respects all agreement and covenants required to be performed or complied with by it under the Merger Agreement at or prior to the effective time;
- since the date of the Merger Agreement, there shall have been no event, change, circumstance, occurrence, effect or state of facts that is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, or results of operations of Graphite; *provided*, however, that any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from the following shall not be included: (1) changes or conditions generally affecting the industries in which Graphite operates, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or law or other action by any governmental entity in response thereto, (3) changes in law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of the Merger Agreement, (5) any specific action taken (or omitted to be taken) by Graphite at or with the express written consent of LENZ or required by or expressly permitted by the terms of the Merger Agreement, (6) a change in the stock price or trading volume of Graphite common stock or the suspension of trading in or delisting of Graphite's securities on Nasdaq (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded) or (7) any failure to meet internal or other estimates, predictions, projections or forecasts (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded); *provided*, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts is not disproportionately adverse to Graphite, as compared to other participants in the industries in which Graphite operates.
- LENZ shall have received certain customary documentation and certifications from Graphite, including written resignations, dated as of the closing date and effective as of the closing executed by the officers and directors of Graphite who are not to continue as officers and directors of the surviving corporation;
- at the closing, the final Graphite net cash minus the amount of the special cash dividend shall be no less than $115,000,000 (the "minimum net cash"); provided, that if the final Graphite net cash minus the amount of the special cash dividend is less than the minimum net cash, then the special cash dividend may be reduced as contemplated by the Merger Agreement;
- each of the lease mitigation agreements shall have been fully executed and performance shall have been completed thereunder; and
- Graphite shall have filed with the SEC the Graphite Form 10-K, including all required audited financial statements in connection therewith, and the information required to be included therein by Part III of

Form 10-K, in form and substance and in full compliance with, and within the time period required by, applicable law, provided that, if the closing occurs prior to December 31, 2023, then this condition shall not be a condition to the obligations of LENZ.

Termination and Termination Fees

Termination of the Merger Agreement

The Merger Agreement may be terminated at any time before the effective time, whether before or after the required stockholder approvals to complete the merger have been obtained, as set forth below:

(a) by mutual consent of Graphite and LENZ;

(b) by either Graphite or LENZ if the Merger shall not have been consummated by June 14, 2024 (subject to possible extension as provided in Merger Agreement, the "End Date"); *provided*, *however*, that this right to terminate the Merger Agreement shall not be available to LENZ or Graphite if such party's (or in the case of Graphite, Merger Sub's) action or failure to act has been a principal cause of the failure of the merger to occur on or before the End Date and such action or failure to act constitutes a breach of the Merger Agreement, *provided*, *further*, however, that, in the event that the SEC has not declared effective under the Securities Act the registration statement on Form S-4, of which this proxy statement/prospectus is a part, by the date which is 60 days prior to the End Date, then either LENZ or Graphite shall be entitled to extend the End Date for an additional 60 days;

(c) by either Graphite or LENZ if a court of competent jurisdiction or other governmental entity shall have issued a final and nonappealable order, or shall have taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the transactions contemplated by the Merger Agreement;

(d) by Graphite if the LENZ stockholder approval shall not have been obtained by written consent of LENZ stockholders in lieu of a meeting within two (2) business days of the registration statement on Form S-4, of which this proxy statement/prospectus is a part, becoming effective in accordance with the provisions of the Securities Act; *provided*, *however*, that once the LENZ stockholder approval has been obtained, Graphite may not terminate the Merger Agreement;

(e) by either Graphite or LENZ if (i) the Graphite special meeting (including any adjournments and postponements thereof) shall have been held and completed and Graphite's stockholders shall have taken a final vote on the Graphite stockholder proposals and (ii) the Graphite stockholder approval shall not have been obtained at the Graphite special meeting (or any adjournment or postponement thereof); *provided*, *however*, that this right to terminate the Merger Agreement shall not be available to Graphite where the failure to obtain the Graphite stockholder approval shall have been caused by the action or failure to act of Graphite and such action or failure to act constitutes a material breach by Graphite of the Merger Agreement;

(f) by LENZ (at any time prior to obtaining the Graphite stockholder approval) if any of the following circumstances shall have occurred:

- Graphite shall have failed to include in this proxy statement/prospectus the Graphite board of directors' recommendation that Graphite stockholders approve the Graphite Stockholder Proposals;
- the Graphite board of directors or any committee thereof shall have made a Graphite board recommendation change or approved, endorsed or recommended any Acquisition Proposal; or
- Graphite shall have entered into any letter of intent or similar document or any Contract relating to any Acquisition Proposal (other than a confidentiality agreement permitted pursuant to the Merger Agreement;

(g) by Graphite (at any time prior to obtaining the LENZ stockholder approval) if any of the following circumstances shall have occurred:

- the LENZ board of directors shall have approved, endorsed or recommended any Acquisition Proposal;

- the LENZ board of directors shall have made a LENZ board recommendation change; or
- LENZ shall have entered into any letter of intent or similar document or any contract relating to any Acquisition Proposal (other than a confidentiality agreement permitted pursuant to the Merger Agreement;

(h) by LENZ, upon a breach of any representation, warranty, covenant or agreement set forth in the Merger Agreement by Graphite or Merger Sub or if any representation or warranty of Graphite or Merger Sub shall have become inaccurate, in either case, such that the conditions set forth in the Merger Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; *provided* that LENZ is not then in material breach of any representation, warranty, covenant or agreement under the Merger Agreement; *provided*, *further* that if such inaccuracy in Graphite's or Merger Sub's representations and warranties or breach by Graphite or Merger Sub is curable by Graphite or Merger Sub, then the Merger Agreement shall not be terminated pursuant to this paragraph as a result of such particular breach or inaccuracy until the earlier of (i) the expiration of a 30-day period commencing upon delivery of written notice from LENZ to Graphite or Merger Sub of such breach or inaccuracy and its intention to terminate pursuant to this paragraph and (ii) Graphite or Merger Sub (as applicable) ceasing to exercise commercially reasonable efforts to cure such breach following delivery of written notice from LENZ to Graphite or Merger Sub of such breach or inaccuracy and its intention to terminate pursuant to this paragraph (it being understood that the Merger Agreement shall not terminate pursuant to this paragraph as a result of such particular breach or inaccuracy if such breach by Graphite or Merger Sub is cured prior to such termination becoming effective); or

(i) by Graphite, upon a breach of any representation, warranty, covenant or agreement set forth in the Merger Agreement by LENZ or if any representation or warranty of Graphite or Merger Sub shall have become inaccurate, in either case, such that the conditions set forth in the Merger Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; *provided* that Graphite is not then in material breach of any representation, warranty, covenant or agreement under the Merger Agreement; *provided*, *further* that if such inaccuracy in LENZ's representations and warranties or breach by LENZ is curable by LENZ, then the Merger Agreement shall not terminate pursuant to this paragraph as a result of such particular breach or inaccuracy until the earlier of (i) the expiration of a 30-day period commencing upon delivery of written notice from Graphite to LENZ of such breach or inaccuracy and its intention to terminate pursuant to this paragraph and (ii) LENZ ceasing to exercise commercially reasonable efforts to cure such breach following delivery of written notice from Graphite to LENZ of such breach or inaccuracy and its intention to terminate pursuant to this paragraph (it being understood that the Merger Agreement shall not terminate pursuant to this paragraph as a result of such particular breach or inaccuracy if such breach by LENZ is cured prior to such termination becoming effective).

The party desiring to terminate the Merger Agreement will give the other party written notice of such termination, specifying the provisions hereof pursuant to which such termination is made and the basis for termination described in reasonable detail.

Termination Fees Payable by Graphite

Graphite must pay LENZ a termination fee of $7.5 million if (A) (i) the Merger Agreement is terminated by Graphite or LENZ pursuant to clause (e) above or by LENZ pursuant to clause (h) above, (ii) at any time after the date of the Merger Agreement and prior to the Graphite special meeting an Acquisition Proposal with respect to Graphite shall have been publicly announced, disclosed or otherwise communicated to the Graphite board of directors (and shall not have been withdrawn), and (iii) within twelve months after the date of such termination, Graphite enters into a definitive agreement with respect to an Acquisition Transaction (with all references to 20% in the definition of Acquisition Transaction being treated as references to 50% for these purposes) (such transaction a "Subsequent Transaction") or consummates a Subsequent Transaction or (B) LENZ terminates the Merger Agreement pursuant to clause (f) above, within five business days of such termination.

Termination Fees Payable by LENZ

LENZ must pay Graphite a termination fee of $7.5 million if (A) (i) the Merger Agreement is terminated by Graphite pursuant to clauses (d) or (i) above, (ii) at any time after the date of the Merger Agreement and before obtaining the LENZ stockholder approval, an Acquisition Proposal with respect to LENZ shall have been publicly announced, disclosed or otherwise communicated to the LENZ board of directors (and shall not have been withdrawn) and (iii) within twelve months after the date of such termination, LENZ enters into a definitive agreement with respect to a Subsequent Transaction or consummates a Subsequent Transaction or (B) Graphite terminates the Merger Agreement pursuant to clause (g) above, within five business days of such termination.

Amendment and Waiver

The Merger Agreement may not be amended except by an instrument in writing signed on behalf of each of LENZ, Merger Sub and Graphite. Such amendment requires the approval of the respective boards of directors of LENZ, Merger Sub and Graphite at any time, except that after the Merger Agreement has been adopted and approved by the LENZ stockholders or Graphite stockholders, no amendment which by law requires further approval by the LENZ stockholders or Graphite stockholders, as the case may be, may be made without such further approval.

Each of LENZ, Merger Sub and Graphite may, by action taken or authorized by their respective boards of directors, to the extent permitted by applicable law, waive compliance with any of the agreements or conditions of the other parties contained in the Merger Agreement; provided, however, that after the LENZ stockholder approval or the Graphite stockholder approval has been obtained, no waiver may be made that pursuant to applicable law requires further approval or adoption by the stockholders of LENZ or Graphite, as applicable, without such further approval or adoption. Any agreement on the part of a party to any such waiver shall be valid only if set forth in a written instrument executed and delivered by a duly authorized officer on behalf of such party. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the parties under the Merger Agreement are cumulative and are not exclusive of any rights or remedies which they would otherwise have under the Merger Agreement.

Fees and Expenses

The Merger Agreement provides all fees and expenses incurred in connection with the Merger Agreement and the transactions contemplated thereby shall be paid by the party incurring such expenses, except as described above in the section titled "*—Termination and Termination Fees*" beginning on page 221 of this proxy statement/ prospectus, and except that LENZ shall pay any fees and expenses incurred in relation to the Nasdaq fees associated with the continued listing of Graphite's securities on Nasdaq and the initial listing application, and Graphite shall pay any fees and expenses incurred in relation to the printing and filing with the SEC of this proxy statement/prospectus (including any financial statements and exhibits) and any amendments or supplements thereto and paid to a financial printer or the SEC.

AGREEMENTS RELATED TO THE MERGER

Support Agreements

Concurrently with the execution of the merger agreement, (i) certain stockholders of Graphite, owning in the aggregate approximately 52% of the outstanding shares of Graphite common stock have entered into the Graphite Support Agreements with Graphite and LENZ to vote all of their shares of Graphite common stock in favor of the Graphite Stockholder Proposals, and (ii) certain stockholders of LENZ holding approximately 70% of the outstanding shares of LENZ capital stock have entered into the LENZ Support Agreements with LENZ and to vote all of their shares of LENZ capital stock in favor of the Merger Agreement and the related contemplated transactions and against any alternative acquisition proposals. In the event of a Graphite board recommendation change, then the aggregate number of shares of Graphite common stock subject to the Graphite Support Agreement will automatically be reduced on a pro rata basis so that the aggregate number of such shares of Graphite common stock shall collectively only constitute the greater of (a) 20% of the outstanding shares of Graphite capital stock or (b) 30% of the votes cast in support of the Graphite Stockholder Proposals.

The foregoing descriptions of the Support Agreements do not purport to be complete and are qualified in their entirety by the full text of the forms of Support Agreements, which are attached hereto as *Annex C* and *Annex D*.

Lock-Up Agreements

Concurrently with the execution of the merger agreement, certain executive officers, directors and stockholders of Graphite and LENZ have entered into the Lock-Up Agreements with Graphite, pursuant to which such parties have agreed not to, except in limited circumstances, sell or transfer their shares of Graphite common stock, for the 90-day period following the closing.

The Graphite stockholders who have executed Lock-Up Agreements as of November 14, 2023, owned in the aggregate, approximately 43% of the shares of Graphite's outstanding capital stock.

The foregoing description of the Lock-Up Agreements does not purport to be complete and is qualified in its entirety by the full text of the form of Lock-Up Agreement, which is attached hereto as *Annex E*.

Subscription Agreement

On November 14, 2023, concurrently with the execution of the Merger Agreement, Graphite entered into the Subscription Agreement with the PIPE investors, pursuant to which, and on the terms and subject to the conditions of which, the PIPE investors have collectively subscribed for approximately $53.5 million of shares of Graphite common stock, which amount may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE investors, in the Graphite private placement.

By approving Proposal No. 1 relating to the merger, Graphite stockholders will also be approving the issuance of shares of Graphite common stock pursuant to the Graphite private placement.

The Subscription Agreement contains customary representations and warranties of Graphite and also contains customary representations and warranties of the purchasers party thereto.

Each purchaser's obligation to purchase shares of Graphite's common stock from Graphite pursuant to the Subscription Agreement is subject to the satisfaction or waiver of certain conditions, including:

- Graphite's representations and warranties in the Subscription Agreement being true and correct in all respects as of the effective date of the Subscription Agreement and true and correct in all material respects as of immediately prior to the closing of the Graphite private placement, subject to certain exceptions;

- Graphite having performed and complied in all material respects with all obligations and conditions required to be performed or complied with by it;
- the issuance of a compliance certificate by the chief executive officer of Graphite;
- all necessary consents, permits, approvals, registrations and waivers having been obtained;
- the satisfaction or waiver of all conditions to the closing of the merger set forth in the Merger Agreement (other than the condition regarding the Graphite private placement) and the closing being set to occur concurrently with the closing of the Graphite private placement;
- no injunction having been issued prohibiting the consummation of the Graphite private placement; and
- Graphite having executed and delivered the registration rights agreement required by the Subscription Agreement.

Graphite's obligation to sell shares of Graphite's common stock to each purchaser pursuant to the Subscription Agreement is subject to the satisfaction or waiver of certain conditions, including:

- the representations and warranties made by each purchaser being true and correct as of the effective date of the Subscription Agreement and true and correct (in all material respects, as applicable) as of the closing date of the Graphite private placement, subject to certain exceptions;
- each purchaser having performed and complied with all obligations and conditions required to be performed or complied with by each purchaser;
- no injunction having been issued prohibiting the purchase of and payment for the Graphite common stock by such purchaser;
- the satisfaction or waiver of all conditions to the closing set forth in the Merger Agreement (other than the condition regarding the Graphite private placement), and the merger having become effective; and
- each purchaser having executed and delivered the registration rights agreement required by the Subscription Agreement.

Prior to consummation of the transactions contemplated thereby, the Subscription Agreement may be changed, waived, amended or modified only by a written instrument executed by Graphite and the purchasers committed to purchase at least a majority of the shares sold in the Graphite private placement. The Subscription Agreement will terminate with no further force and effect upon the earliest to occur of: (a) such date and time as the Merger Agreement is terminated in accordance with its terms; (b) with respect to any individual purchaser, upon the mutual written agreement of Graphite and such purchaser; (c) if any of the conditions to closing, including the completion of the merger, set forth in the Subscription Agreement are not satisfied or waived on or prior to the time required by the Subscription Agreement and, as a result thereof, the transactions contemplated by the Subscription Agreement fail to occur; and (d) if the completion of the merger has not occurred on or before June 14, 2024, other than as a result of a willful breach of a purchaser's obligations under the Subscription Agreement.

The closing of the Graphite private placement is expected to occur concurrently with, and is conditioned upon, the closing of the merger. Following the closing of the Graphite private placement, assuming a subscription amount of $53.5 million, the former LENZ stockholders are expected to own approximately 56.3% of the outstanding shares of Graphite common stock on a fully-diluted basis, the stockholders of Graphite as of immediately prior to the effective time of the merger are expected to own approximately 30.7% of the outstanding shares of Graphite common stock on a fully-diluted basis and the investors issued shares of Graphite common stock in the Graphite private placement are expected to own approximately 13.0% of the outstanding shares of Graphite common stock on a fully-diluted basis (excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP).

GRAPHITE DIRECTORS, OFFICERS AND CORPORATE GOVERNANCE

The following sets forth certain information, as of February 1, 2024, concerning Graphite's directors and executive officers.

Name	Positions and Offices Held with Graphite	Age
Kimberlee C. Drapkin	President, Chief Executive Officer and Director	55
Perry Karsen	Director and Board Chair	68
Abraham Bassan	Director	39
Jerel Davis, Ph.D.	Director	46
Kristen M. Hege, M.D.	Director	59
Joseph Jimenez	Director	63
Matthew Porteus, M.D., Ph.D.	Director	59
Carlo Rizzuto, Ph.D.	Director	54
Smital Shah	Director	46
Jo Viney, Ph.D.	Director	58

Kimberlee C. Drapkin has served as Graphite's president and chief executive officer since August 2023 and as a director of Graphite since July 2023. Ms. Drapkin has over 25 years of experience working with private and publicly traded biotechnology and pharmaceutical companies, including building and leading finance functions, raising capital, and leading strategic financial planning. Most recently, Ms. Drapkin was the Chief Financial Officer at Jounce Therapeutics, Inc., a position she held from August 2015 until the company's acquisition by Concentra Biosciences, LLC in May 2023, playing a key role in building Jounce's financial infrastructure. Prior to joining Jounce, Ms. Drapkin owned a financial consulting firm where she served as the interim chief financial officer for numerous early-stage biotechnology companies. Previously, she was the Chief Financial Officer at EPIX Pharmaceuticals, Inc. and also spent ten years in roles of increasing responsibility within the finance organization at Millennium Pharmaceuticals, Inc. Her career began in the technology and life sciences practice at PriceWaterhouseCoopers LLP. Ms. Drapkin served as a member of the board of directors of Proteostasis Therapeutics, Inc. until the completion of the merger of Proteostasis and Yumanity Therapeutics, Inc., at which point she became a member of the Yumanity board of directors. Ms. Drapkin then served on the board of directors of Yumanity through the completion of its reverse merger with Kineta, Inc. She currently serves on the board of directors of Acumen Pharmaceuticals, Inc. (Nasdaq: ABOS), Imugene Limited (ASX: IMU) and Kineta, Inc. (Nasdaq: KA), where she is a member of audit committee at all three companies. Ms. Drapkin holds a B.S. in accounting from Babson College. Graphite believes that Ms. Drapkin's role as Graphite's chief executive officer qualifies her to serve as a member of the Graphite board of directors.

Perry Karsen has served as the chair of the Graphite board of directors since October 2020 and as a member of the Graphite board of directors since June 2020. From May 2013 to December 2015, Mr. Karsen was the Chief Executive Officer of Celgene Cellular Therapeutics, Inc., a division of Celgene Corporation (collectively, "Celgene"). Prior to that, Mr. Karsen served as Chief Operations Officer and Executive Vice President of Celgene from July 2010 to May 2013 and as Senior Vice President and Head of Worldwide Business Development of Celgene from 2004 to 2009. From February 2009 and July 2010, Mr. Karsen was Chief Executive Officer of Pearl Therapeutics Inc., subsequently acquired by AstraZeneca plc. (Nasdaq: AZN). Prior to that, Mr. Karsen held executive positions at Human Genome Sciences, Inc., a publicly traded biotechnology company (since acquired by GlaxoSmithKline plc (Swiss: GSK.SW)), Bristol-Myers Squibb Co., Genentech, Inc. (since acquired by Hoffmann-La Roche AG (Roche)), and Abbott Laboratories. In addition, Mr. Karsen served as a General Partner at Pequot Capital Management, Inc. He is currently a member of the boards of Jounce Therapeutics, Inc. (Nasdaq: JNCE) since January 2016 and Nitrase Therapeutics, Inc. since May 2020. Mr. Karsen formerly served on the boards of several public biotechnology companies, including Intellia Therapeutics, Inc. (Nasdaq: INTL) from April 2016 to December 2020, Oncomed Pharmaceuticals, Inc. (Nasdaq: OMED) (until it was acquired by Mereo BioPharma (Nasdaq: MREO)), from January 2016 to April 2019,

Voyager Therapeutics, Inc. (Nasdaq: VYGR) from July 2015 to August 2019, Agios Pharmaceuticals, Inc. (Nasdaq: AGIO) from November 2011 to March 2016, and Alliqua Biomedical, Inc. (Nasdaq: ALQA) from December 2013 to February 2016. Mr. Karsen was also formerly a member of the boards of directors of the Biotechnology Innovation Organization (BIO) and the Alliance for Regenerative Medicine. Mr. Karsen received his B.S. in Biological Sciences from the University of Illinois, Urbana-Champaign, a Masters of Management from Northwestern University's Kellogg Graduate School of Management and an M.A.T. in Biology from Duke University. Graphite believes that Mr. Karsen's executive leadership experience, including his experience as an executive at large and successful multi-national pharmaceutical companies and membership on boards of directors of various publicly traded biotechnology companies, qualifies him to serve as a member of the Graphite board of directors.

Abraham Bassan has served on the Graphite board of directors since June 2020. Mr. Bassan is currently a Principal at Samsara BioCapital, L.P., a life science investment firm that takes a long-term view to company building in the biotech space. Since 2017, Mr. Bassan has been part of the investment team at Samsara Biocapital, L.P., where he plays a central role in sourcing new investments and overseeing operations at current portfolio companies in his capacity as a director or board observer. Mr. Bassan currently serves on the boards of directors of CARGO Therapeutics, Inc. (formerly Syncopation Life Sciences, Inc.), since February, 2021, Septerna, Inc., since November, 2021, Vedere Bio II, Inc., since April, 2021, and Link Cell Therapies Inc., since May, 2022. From February 2021 to May 2022, Mr. Bassan was President of CARGO Therapeutics, Inc. (formerly Syncopation Life Sciences, Inc.). From December 2014 to July 2017, Mr. Bassan held various leadership roles at Revolution Medicines, Inc. (Nasdaq: RVMD), including Director of Program Biology and Director of Project Management, where he co-led the initial stages of RVMD's 4EBP1/mTORC1 cancer program. From May 2010 to August 2012, Mr. Bassan was an Associate Director at bluebird bio, Inc. (Nasdaq: BLUE), where he was also the Project Manager for the company's ß-Thalassemia, Sickle Cell Anemia, and ALD gene therapy programs. Mr. Bassan received his A.B. in Molecular Biology from Princeton University and a Master of Sciences in Development Biology from Stanford University. Graphite believes that Mr. Bassan's significant knowledge of the life sciences industry and experience and expertise in evaluating and investing in life sciences companies qualifies him to serve as a member of the Graphite board of directors.

Jerel Davis, Ph.D., has served on the Graphite board of directors since its inception in October 2019. Dr. Davis is currently a Managing Director of Versant Venture Management, LLC, a healthcare investment firm which he joined in 2012 and has held his current role since 2015. Dr. Davis currently serves on the boards of public companies, Chinook Therapeutics, Inc. (Nasdaq: KDNY) since December 2018 and Repare Therapeutics, Inc. (Nasdaq: RPTX) since September 2016. Dr. Davis also serves on the boards of a number of private companies including Nested Therapeutics, Inc., RayzeBio, Inc., Tentarix Biotherapeutics, Inc., Ventus Therapeutics Inc., and Turnstone Biologics Corp., among others. Prior to joining Versant Venture Management, LLC, Dr. Davis worked at McKinsey & Company, Inc., where he serviced various healthcare markets including the United States, Europe and China. Dr. Davis received a B.S. in Mathematics and Biology from Pepperdine University and a Ph.D. in Population Genetics from Stanford University. Graphite believes that Dr. Davis's broad and extensive experience in the life sciences industry, both investing in and launching numerous life sciences companies, qualifies him to serve as a member of the Graphite board of directors.

Kristen M. Hege, M.D., has served as a member of the Graphite board of directors since April 2021. Dr. Hege joined Celgene Corporation in 2010 as Vice President, Translational Development and is currently Senior Vice President, Early Clinical Development, Hematology/Oncology & Cell Therapy at Bristol Myers Squibb Company (NYSE: BMY) (following its acquisition of Celgene Corporation in 2019). Prior to Celgene Corporation, she served as Chief Medical Officer at Cellerant Therapeutics, Inc. and Acting Chief Medical Officer at Aragon Pharmaceuticals, Inc. and Theraclone Sciences, Inc. Dr. Hege was also Vice President, Clinical Research and Development at Cell Genesys. She currently serves as a member of the board of directors at Mersana Therapeutics, Inc. (Nasdaq: MRSN) since 2016 and has previously served as a member of the board of directors at Arcus Biosciences, Inc. (NYSE: RCUS) from 2018 to 2019 and as a Board Observer for Flexus Biosciences from 2014 to 2015. She also previously served as a Volunteer-at-Large Director for the Society for

Immunotherapy of Cancer from 2016 to 2019 and the BayBio/California Life Sciences Association from 2014 to 2016. Dr. Hege is currently a volunteer Clinical Professor of Medicine, Hematology/Oncology at the University of California, San Francisco Medical Center, where she was previously an active faculty member since 1996. Dr. Hege received a B.A. in Biochemistry from Dartmouth College summa cum laude, an M.D. from University of California, San Francisco, Internal Medicine training at Harvard's Brigham & Women's Hospital, and Board certification in Hematology and Medical Oncology from the University of California, San Francisco. Graphite believes that Dr. Hege's medical background and experience in the biotechnology industry qualify her to serve as a member of the Graphite board of directors.

Joseph Jimenez has served as a member of the Graphite board of directors since June 2020. Mr. Jimenez is currently the Co-Founder and Managing Partner of Aditum Bio Management Company LLC, a biotechnology venture fund, where he has served since August 2019. He was formerly the Chief Executive Officer of Novartis AG, a position he held from February 2010 to January 2018. Prior to that, Mr. Jimenez held several senior positions at Novartis AG from April 2007 to January 2010, including Division Head of Novartis Pharmaceuticals and leadership of the company's Consumer Health Division. Prior to that, Mr. Jimenez was advisor to the Blackstone Group L.P. from July 2006 to March 2007. Additionally, Mr. Jimenez has held various leadership roles at H. J. Heinz Company, L.P. in Europe and North America from 1999 to 2006 and at ConAgra Foods Inc. from 1993 to 1998. Mr. Jimenez is currently a member of the board of directors of General Motors Company (NYSE: GM) since June 2015, Procter & Gamble Co. (NYSE: PG) since March 2018 and Century Therapeutics, Inc. (Nasdaq: IPSC) since August 2019. Mr. Jimenez received a B.A. in Economics from Stanford University and an M.B.A. from University of California, Berkeley's Haas School of Business. Graphite believes that Mr. Jimenez's extensive leadership experience and executive leadership at various technology companies qualify him to serve as a member of the Graphite board of directors.

Matthew Porteus, M.D., Ph.D., has served as a member of the Graphite board of directors since March 2020. Dr. Porteus is an Associate Professor of Pediatrics of the Department of Pediatrics, Divisions of Hematology/Oncology and Human Gene Therapy, at Stanford School of Medicine, where he has served in various leadership roles since October 2010. Prior to joining the Stanford School of Medicine, Dr. Porteus served as an Assistant Professor at the University of Texas Southwestern Medical Center from February 2003 to August 2010. His research focuses on developing homologous recombination-based therapies for genetic and other diseases. Dr. Porteus also maintains a clinical practice at the Lucille Packard Children's Hospital, where he is an Attending Physician for the Pediatric Bone Marrow Transplant Service. Dr. Porteus completed his residency training in Pediatrics at Boston Children's Hospital and fellowship training in Pediatric Hematology/Oncology at Boston Children's Hospital and the Dana Farber Cancer Institute. For his post-doctoral work, Dr. Porteus trained at the Massachusetts Institute of Technology and the California Institute of Technology. During this time, he began studying gene editing and was the first to show that engineered nucleases could be used to precisely modify human cells by homologous recombination. Dr. Porteus graduated Magna Cum Laude with an A.B. in History and Science from Harvard University and completed his M.D. and Ph.D. degrees at Stanford University. Graphite believes that Dr. Porteus's medical background and extensive knowledge surrounding genetic diseases, gene therapy and gene editing qualify him to serve as a member of the Graphite board of directors.

Carlo Rizzuto, Ph.D., has served as a member of the Graphite board of directors since March 2020. Dr. Rizzuto is currently a Managing Director at Versant Venture Management, LLC, a healthcare investment firm. He has been with the firm since November 2012 where he has served in a variety of roles including operating principal, venture partner and partner. Prior to that, Dr. Rizzuto worked at Novartis AG, where he was a Global Program Team Director from 2010 to 2012. Dr. Rizzuto currently serves on the board of directors of Century Therapeutics, Inc. (Nasdaq: IPSC) since March 2018 and previously served on the board of directors of Pandion Therapeutics, Inc., from January 2018 until its acquisition by Merck (NYSE: MRK) in March 2021. Dr. Rizzuto received a B.A. in Biology from the University of Virginia and a Ph.D. in Virology from Harvard University. Graphite believes that Dr. Rizzuto's experience as an investor in the life sciences industry qualifies him to serve as a member of the Graphite board of directors.

Smital Shah has served as a member of the Graphite board of directors since April 2021. Ms. Shah currently serves on the board of directors of Pliant Therapeutics, Inc. (Nasdaq: PLRX) since March 2019. From December 2018 to December 2022, Ms. Shah was the Chief Business and Financial Officer at ProQR Therapeutics NV (Nasdaq: PRQR) and prior to that, she was the company's Chief Financial Officer from October 2014 to December 2018. From August 2012 to September 2014, Ms. Shah was in Corporate Treasury at Gilead Sciences, Inc. (Nasdaq: GILD). Prior to Gilead Sciences, Inc., she was an investment banker at Leerink Partners LLC and JP Morgan Chase and Co., where she focused on capital raising and strategic transactions in the biotechnology space. Ms. Shah also held various research and development roles at Johnson & Johnson Company. Ms. Shah holds a B.S. in Chemical Engineering from the University of Mumbai, a M.S. in Chemical Engineering from Virginia Tech and an M.B.A. from the University of California, Berkeley Haas School of Business. Graphite believes that Ms. Shah's extensive experience in the life sciences industry and her leadership experience as a senior financial executive qualify her to serve as a member of the Graphite board of directors.

Jo Viney, Ph.D., has served as a member of the Graphite board of directors since March 2021. Since October 2021, Dr. Viney has been a Co-Founder, President and Chief Executive Officer of Seismic Therapeutic, Inc., a biotechnology company. From July 2019 to October 2021, Dr. Viney was the Co-Founder and President of Pandion Therapeutics Inc. (Nasdaq: PAND), subsequently acquired by Merck & Co Inc. (NYSE: MRK), after serving as its Chief Scientific Officer since April 2017. From November 2015 to November 2016, Dr. Viney served as Senior Vice President, Drug Discovery at Biogen Inc. (Nasdaq: BIIB), after serving as Vice President, Immunology Research from July 2011 to October 2015. From September 2003 to April 2011, Dr. Viney served as Executive Director of Inflammation Research at Amgen, Inc. (Nasdaq: AMGN), after serving as Director of Inflammation Research from July 2002 to August 2003. Dr. Viney currently serves on the boards of public biotechnology companies, Harpoon Therapeutics, Inc. (Nasdaq: HARP) and Finch Therapeutics Group, Inc. (Nasdaq: FNCH). Dr. Viney holds a BSc in Biophysical Science from the University of East London and a Ph.D. in Immunology from the University of London, St. Bartholomew's Hospital Medical School. Graphite believes that Dr. Viney's substantial leadership experience in the biotechnology industry qualifies her to serve as a member of the Graphite board of directors.

Number and Terms of Officers and Directors

The Graphite board of directors currently consists of ten members. In accordance with the terms of the Graphite charter and the Graphite bylaws, Graphite's board of directors is divided into three classes, Class I, Class II and Class III, with members of each class serving staggered three-year terms. The members of the classes are divided as follows:

- the Class I directors are Jerel Davis, Ph.D., Perry Karsen and Joseph Jimenez, and their terms will expire at the annual meeting of stockholders to be held in 2025;
- the Class II directors are Abraham Bassan, Matthew Porteus, M.D., Ph.D. and Jo Viney, Ph.D., and their terms will expire at the annual meeting of stockholders to be held in 2026; and
- the Class III directors are Kristen M. Hege, M.D., Kimberlee C. Drapkin, Carlo Rizzuto, Ph.D. and Smital Shah, and their terms will expire at the annual meeting of stockholders to be held in 2024.

Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

The Graphite charter and Graphite bylaws provide that the authorized number of directors may be changed only by resolution of the board of directors. The Graphite charter also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors, and that any vacancy on the Graphite board of directors, including a vacancy resulting from an enlargement of the Graphite board of directors, may be filled only by vote of a majority of the directors then in office even if less than a quorum.

Board Committees

The Graphite board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee, each of which operate pursuant to a charter adopted by the Graphite board of directors. Graphite believes that the composition and functioning of all of its committees comply with the applicable requirements of Nasdaq, the Sarbanes-Oxley Act of 2002 and SEC rules and regulations that are applicable to Graphite. Graphite intends to comply with future requirements to the extent they become applicable to it.

The full text of Graphite's audit committee charter, compensation committee charter and nominating and corporate governance charter is posted on the investor relations portion of Graphite's website at *https://ir.graphitebio.com/corporate-governance*.

The Graphite board of directors also has a standing science and technology committee, which is an advisory committee. Matthew Porteus, M.D., Ph.D., and Carlo Rizzuto, Ph.D., serve on the science and technology committee, which is chaired by both Kristen Hege, M.D., and Jo Viney, Ph.D.

Audit Committee

Smital Shah, Perry Karsen and Joseph Jimenez serve on the audit committee, which is chaired by Ms. Shah. Mr. Karsen was appointed to the audit committee on April 13, 2022 in the place of Dr. Davis. The Graphite board of directors has determined that each member of the audit committee is "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and that each member of the audit committee has sufficient knowledge in financial and auditing matters to serve on the audit committee. The Graphite board of directors has designated Ms. Shah as an "audit committee financial expert," as defined under the applicable rules of the SEC. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of the independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by the independent registered public accounting firm;
- reviewing the overall audit plan with the independent registered public accounting firm and members of management responsible for preparing Graphite's financial statements;
- reviewing and discussing with management and the independent registered public accounting firm Graphite's annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by Graphite;
- coordinating the oversight and reviewing the adequacy of Graphite's internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and the independent registered public accounting firm whether Graphite's audited financial statements shall be included in its Annual Report on Form 10-K;
- monitoring the integrity of Graphite's financial statements and Graphite's compliance with legal and regulatory requirements as they relate to its financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in Graphite's annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee

Abraham Bassan, Perry Karsen and Carlo Rizzuto, Ph.D. serve on the compensation committee, which is chaired by Mr. Bassan. The Graphite board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable Nasdaq rules. The compensation committee's responsibilities include:

- annually reviewing and recommending to the board of directors the corporate goals and objectives relevant to the compensation of Graphite's principal executive officer;
- evaluating the performance of Graphite's principal executive officer in light of such corporate goals and objectives and based on such evaluation: (i) determining, or recommending to the board of directors, cash compensation of Graphite's principal executive officer; and (ii) reviewing and approving, or recommending to the board of directors, grants and awards to Graphite's principal executive officer under equity-based plans;
- reviewing and approving the cash compensation (including severance), incentive compensation plans, equity-based plans, perquisites and other benefits of Graphite's other executive officers;
- reviewing management's aggregate decision regarding the compensation of all employees of Graphite;
- reviewing and establishing Graphite's overall management compensation philosophy and policy;
- overseeing and administering Graphite's compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq rules;
- reviewing and approving, or, at the request of the board of directors, recommending to the board of directors, Graphite's policies and procedures for the grant of equity-based awards;
- evaluating and determining, or recommending for determination by the board of directors, the achievement of milestones under any inventive or equity-based awards to officers, consultants and other employees;
- reviewing and recommending to the board of directors the compensation of Graphite's directors;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in Graphite's annual proxy statement; and
- reviewing and approving the retention, termination or compensation of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

Perry Karsen, Jerel Davis, Ph.D., and Joseph Jimenez serve on the nominating and corporate governance committee, which is chaired by Mr. Karsen. The Graphite board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable Nasdaq rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise Graphite;
- identifying individuals qualified to become members of the board of directors;
- recommending to the Graphite board of directors the persons to be nominated for election as directors and to each of the board's committees;

- developing and recommending to the Graphite board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of the Graphite board of directors and management.

The nominating and corporate governance committee considers candidates for the Graphite board of directors membership suggested by its members and the Chief Executive Officer. Additionally, in selecting nominees for directors, the nominating and corporate governance committee will review candidates recommended by stockholders in the same manner and using the same general criteria as candidates recruited by the committee and/or recommended by the Graphite board of directors. Any stockholder who wishes to recommend a candidate for consideration by the committee as a nominee for director should follow the procedures described later in this proxy statement/prospectus under the heading "*Stockholder Proposals*." The nominating and corporate governance committee will also consider whether to nominate any person proposed by a stockholder in accordance with the provisions of Graphite's bylaws relating to stockholder nominations as described later in this proxy statement/prospectus under the heading "*Stockholder Proposals*."

Identifying and Evaluating Director Nominees.

The Graphite nominating and corporate governance committee is responsible for filling vacancies on the Graphite board of directors and for nominating candidates for election by its stockholders each year in the class of directors whose term expires at the relevant annual meeting. The Graphite board of directors delegates the selection and nomination process to the nominating and corporate governance committee, with the expectation that other members of the Graphite board of directors, and of management, will be requested to take part in the process as appropriate.

In identifying and recommending nominees for directors, the nominating and corporate governance committee may consider, among other factors that it considers appropriate, character, integrity, judgment, diversity, independence, skills, education, expertise, business acumen, business experience, length of service, understanding of Graphite's business and industry, conflicts of interest, and other commitments.

Board and Committee Meetings

During 2022, the full Graphite board of directors met eight times, the audit committee met five times, the compensation committee met eight times, and the nominating and corporate governance committee met two times. During 2022, each member of the Graphite board of directors attended in person or participated in 75% or more of the aggregate of (i) the total number of meetings of the Graphite board of directors (held during the period for which such person has been a director) and (ii) the total number of meetings held by all committees of the Graphite board of directors on which such person served (during the periods that such person served).

Director Attendance at Annual Meeting of Stockholders

Directors are encouraged to attend the annual meeting of stockholders to the extent practicable. All Graphite directors attended Graphite's annual meeting of stockholders in 2023.

Policy on Trading, Pledging and Hedging of Graphite Stock

Graphite's Insider Trading Policy prohibits its executive officers, the non-employee members of the board of directors and certain other employees from engaging in the following transactions:

- selling any Graphite securities that they do not own at the time of the sale (referred to as a "short sale");
- buying or selling puts, calls, other derivative securities of Graphite or any derivative securities that provide the economic equivalent of ownership of any of Graphite's securities or an opportunity, direct

or indirect, to profit from any change in the value of Graphite's securities or engaging in any other hedging transaction with respect to Graphite's securities;

- using Graphite's securities as collateral in a margin account; and
- pledging Graphite's securities as collateral for a loan (or modifying an existing pledge).

As of the date of this proxy statement/prospectus, none of Graphite's executive officers or non-employee directors have previously engaged in any hedging or pledging transaction involving Graphite's securities.

Compensation Committee Interlocks and Insider Participation

During 2022, Abraham Bassan, Perry Karsen and Carlo Rizzuto, Ph.D. served on the compensation committee. None of the members of Graphite's compensation committee has at any time during the prior three years been one of its officers or employees. None of Graphite's executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on the Graphite board of directors or compensation committee.

Code of Business Conduct and Ethics

The Graphite board of directors adopted a Code of Business Conduct and Ethics in connection with the IPO in June 2021. The Code of Business Conduct and Ethics applies to all of employees, officers (including the principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions), agents and representatives, including directors and consultants. The full text of the Code of Business Conduct and Ethics is posted on Graphite's website at *https://ir.graphitebio.com/corporate-governance/documents-charters*. If Graphite makes any substantive amendments to, or grant any waivers from, the Code of Business Conduct and Ethics for any officer or director, it will disclose the nature of such amendment or waiver on its website or in a current report on Form 8-K.

Board Leadership Structure and Board's Role in Risk Oversight

Perry Karsen is the current chair of the Graphite board of directors and Kimberlee C. Drapkin is Graphite's current President and Chief Executive Officer, hence the roles of chair and the President and Chief Executive Officer are separated. Graphite believes that separating these positions allows its President and Chief Executive Officer to focus on setting the overall strategic direction of Graphite, expanding the organization to deliver on Graphite's strategy and overseeing Graphite's day-to-day business, while allowing the chair of the board to lead the board of directors in its fundamental role of providing strategic advice to and independent oversight of management.

The Graphite board of directors recognizes the time, effort and energy that the President and Chief Executive Officer is required to devote to her position in the current business environment, as well as the commitment required to serve as Graphite's chair of the Graphite board of directors, particularly as the board of directors' oversight responsibilities continue to grow. While Graphite's amended and restated bylaws and corporate governance guidelines do not require that the chair of the board and president positions be separate, the Graphite board of directors believes that having separate positions is the appropriate leadership structure for it at this time and demonstrates Graphite's commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. Graphite faces a number of risks, including risks relating to its financial condition, development and commercialization activities, operations, strategic direction and intellectual property. Management is responsible for the day-to-day management of risks Graphite faces, while the board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, the board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the Graphite board of directors in overseeing the management of Graphite's risks is conducted primarily through committees of the Graphite board of directors, as disclosed in the descriptions of each of the committees above and in the charters of each of the committees. The full Graphite board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management Graphite's major risk exposures, their potential impact on Graphite, and the steps Graphite takes to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairperson of the relevant committee reports on the discussion to the full Graphite board of directors during the committee reports portion of the next board meeting. This enables the Graphite board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Communication with the Directors of Graphite Bio, Inc.

Any interested party with concerns about Graphite may report such concerns to the Graphite board of directors or the chairman of the Graphite board of directors or the chairman of Graphite's nominating and corporate governance committee, by submitting a written communication to the attention of such director at the following address:

c/o Graphite Bio, Inc.
611 Gateway Blvd, Suite 120
South San Francisco, CA 94080
United States

A copy of any such written communication may also be forwarded to Graphite's legal counsel and a copy of such communication may be retained for a reasonable period of time. The director may discuss the matter with Graphite's legal counsel, with independent advisors, with non-management directors, or with Graphite's management, or may take other action or no action as the director determines in good faith, using reasonable judgment, and applying his or her own discretion.

Communications may be forwarded to other directors if they relate to important substantive matters and include suggestions or comments that may be important for other directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances, and matters as to which Graphite tends to receive repetitive or duplicative communications.

The audit committee oversees the procedures for the receipt, retention, and treatment of complaints received by Graphite regarding accounting, internal accounting controls, or audit matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting, internal accounting controls or auditing matters. Graphite has also established a toll-free telephone number for the reporting of such activity, which is 1-877-647-3335.

Board Diversity

Graphite's Corporate Governance Guidelines provide that diversity of background and experience should be considered in determining director candidates as well as other factors such as a candidate's character, judgment, skills, education, expertise and absence of conflicts of interest. However, Graphite does not have a formal policy concerning the diversity of the Graphite board of directors. Graphite's priority in selection of board members is identification of members who will further the interests of its stockholders through their established records of professional accomplishment, their ability to contribute positively to the collaborative culture among board members, and their knowledge of Graphite's business and understanding of the competitive landscape in which it operates and adherence to high ethical standards. Although the nominating and corporate governance committee does not have a formal diversity policy and does not follow any ratio or formula with respect to diversity in order

to determine the appropriate composition of the board of directors, the nominating and corporate governance committee and the full Graphite board of directors are committed to creating a board of directors that promotes Graphite's strategic objectives and fulfills its responsibilities to the Graphite stockholders, and considers diversity of gender, race, national origin, education, professional experience, and differences in viewpoints and skills when evaluating proposed director candidates.

Graphite complies with Nasdaq Rule 5605 by having four diverse directors (40%), including two from underrepresented minorities. As required by Nasdaq Rule 5606 as approved by the SEC in August 2021, Graphite is providing additional information about the gender and demographic diversity of its directors in the format required by such rule. The information in the matrix below is based solely on information provided by Graphite directors about their gender and demographic self-identification.

Board Diversity Matrix (As of February 1, 2024)				
Total Number of Directors	**10**			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	**4**	**6**		
Part II: Demographic Background				
African American or Black				
Alaskan Native or Native American				
Asian	**1**			
Hispanic or Latinx		**1**		
Native Hawaiian or Pacific Islander				
White	**3**	**4**		
Two or More Races or Ethnicities				
LGBTQ+				
Did Not Disclose Demographic Background	**1**			

GRAPHITE EXECUTIVE COMPENSATION

Executive Officer Compensation

Graphite's named executive officers for the year ended December 31, 2023 are:

- Kimberlee Drapkin, Graphite's interim President and Chief Executive Officer†;
- Josh Lehrer, M.D., Graphite's former President and Chief Executive Officer+; and
- Alethia Young, Graphite's former Chief Financial Officer*.

† Kimberlee Drapkin has served as Graphite's interim President and Chief Executive Officer since August 21, 2023.
+ Josh Lehrer was Graphite's President and Chief Executive Officer through August 21, 2023.
* Alethia Young was Graphite's Chief Financial Officer through June 30, 2023.

2023 Summary Compensation Table

The following table presents the compensation awarded to, earned by or paid to each of Graphite's named executive officers for the years indicated:

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	Non-equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Kimberlee Drapkin(2)	2023	200,521	—	71,148	—	—	271,669
Interim President, Chief Executive Officer and Director							
Josh Lehrer, M.D(3).	2023	361,778	—	1,050,446(4)	—	491,253(5)	1,903,477
Former President, Chief Executive Officer and Director	2022	550,000	—	4,705,285	233,750	1,500	5,490,535
Alethia R. Young(6)	2023	232,950	—	385,164(7)	—	50,000(8)	668,114
Former Chief Financial Officer	2022	337,500	170,000	1,212,715	115,274	151,350	1,986,839

(1) The amounts reported represent the aggregate grant date fair value of the stock options granted to Graphite's named executive officers during the applicable fiscal year, calculated in accordance with Financial Accounting Standard Board ("FASB") Accounting Standards Codification ("ASC") Topic 718. Such grant date fair values do not take into account any estimated forfeitures. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in notes 2 and 11 to Graphite's financial statements included herein for the year ended December 31, 2023. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by Graphite's named executive officers upon the exercise of the stock options or any sale of the underlying shares of common stock.
(2) Ms. Drapkin commenced employment with Graphite on August 21, 2023. Her 2023 annual base salary is pro-rated based on her employment commencement date.
(3) Dr. Lehrer resigned as Chief Executive Officer on August 21, 2023 and transitioned to serve as a consultant to Graphite on such date. His 2023 annual base salary is pro-rated based on his resignation date. Dr. Lehrer did not receive any cash compensation for his services as a consultant to Graphite.
(4) Includes an aggregate grant date fair value of $918,480 for Dr. Lehrer's 2023 option grants as well as an incremental fair value of $131,966, in each case calculated in accordance with FASB ASC Topic 718, related to the modification of the Dr. Lehrer's outstanding options to provide for the extension of their post-termination exercise periods.
(5) Includes a payment equal to $286,000 pursuant to the Lehrer Retention Agreement, as well as severance payments in the amount of $190,667 in base salary continuation and $14,586 in COBRA premium reimbursements, made to Dr. Lehrer pursuant to the Lehrer Separation Agreement.
(6) Ms. Young resigned as Chief Financial Officer, effective June 30, 2023.
(7) Includes an aggregate grant date fair value of $336,776 for Ms. Young's 2023 option grants as well as an incremental fair value of $48,388, in each case calculated in accordance with FASB ASC Topic 718, related to the modification of Ms. Young's outstanding options to provide for the extension of their post-termination exercise periods.
(8) Includes reimbursements for relocation housing assistance paid to Ms. Young for the first quarter of the fiscal year ended December 31, 2023.

Narrative to 2023 Summary Compensation Table

Graphite's compensation committee reviews compensation annually for all employees, including Graphite's executive officers. In setting executive base salaries and bonuses and granting equity incentive awards, the compensation committee considers compensation for comparable positions in the market, the historical compensation levels of Graphite's executive officers, individual performance as compared to Graphite's expectations and objectives, internal equity, Graphite's desire to motivate Graphite's employees to achieve short- and long-term results that are in the best interests of the Graphite stockholders, and a long-term commitment to Graphite. Graphite targets a general competitive position, based on independent third-party benchmark analytics to inform the mix of compensation of base salary, bonus and long-term incentives.

Graphite's compensation committee is primarily responsible for determining the compensation for Graphite's executive officers. Graphite's compensation committee typically reviews and discusses management's proposed compensation with Graphite's Chief Executive Officer for all executives other than the Chief Executive Officer. Based on those discussions and its discretion, taking into account the factors noted above, the compensation committee then sets the compensation for each executive officer other than the Chief Executive Officer. For the Chief Executive Officer, Graphite's compensation committee determines and approves the compensation, or upon request of the Graphite board of directors, recommends Graphite's Chief Executive Officer's compensation for approval by the Graphite board of directors. Graphite's compensation committee may delegate certain authorities to an officer of Graphite and has delegated to Graphite's Chief Executive Officer the authority to make certain equity award grants to employees (other than Graphite's executive officers), within specified limits approved by the compensation committee. Graphite's compensation committee has the authority to engage the services of a consulting firm or other outside advisor to assist it in designing Graphite's executive compensation programs and in making compensation decisions. During 2023, the compensation committee retained the services of Aon plc ("Aon"), formerly known as Radford, as its external compensation consultant to advise on executive compensation matters including Graphite's overall compensation program design and collection of market data to inform Graphite's compensation programs for Graphite's executive officers and members of the Graphite board of directors. Aon reports directly to Graphite's compensation committee. Graphite's compensation committee annually assesses its independence consistent with Nasdaq's listing standards and concluded that the engagement of such consultant did not raise any conflict of interest.

Base Salaries

The annual base salary for each of Ms. Drapkin, Dr. Lehrer and Ms. Young for the fiscal year ended December 31, 2023 was $550,000, $572,000, and $468,000, respectively. The pro-rated annual base salary for Ms. Drapkin from her hiring on August 21, 2023 to December 31, 2023 was $200,521. The pro-rated annual base salaries for Dr. Lehrer and Ms. Young from January 1, 2023 to their respective employment termination dates were $361,778 and $232,950, respectively. Graphite's compensation committee reviews the base salaries of Graphite's executive officers, including Graphite's named executive officers, from time to time and makes adjustments (or, in the case of Graphite's Chief Executive Officer, may recommend adjustments for approval by the Graphite board of directors) as it determines to be reasonable and necessary to reflect the scope of the executive officer's performance, contributions, responsibilities, experience, prior salary level, position (in the case of a promotion) and market conditions, including base salary amounts relative to similarly situated executive officers at peer group companies.

Bonuses

Ms. Drapkin does not have a target annual bonus and does not participate in any of Graphite's incentive compensation plans. The target annual bonuses for Dr. Lehrer and Ms. Young from January 1, 2023 through the termination of their respective employments were 50%, and 40%, respectively, of the applicable named executive officer's annual base salary. Both Dr. Lehrer and Ms. Young terminated employment with Graphite prior to December 31, 2023 and, as such, did not receive an annual bonus (or any portion thereof) for 2023.

Equity Compensation

During the fiscal year ended December 31, 2023, Graphite granted stock option awards to each of Graphite's named executive officers, as described in more detail in the "Outstanding Equity Awards at Fiscal 2023 Year-End" table.

Perquisites or Personal Benefits

Graphite generally does not provide significant perquisites or personal benefits to Graphite's employees with an aggregate equal to or greater than $10,000, other than reimbursements for relocation expenses for Ms. Young.

401(k) Plan

Graphite maintained a tax-qualified retirement plan (the "401(k) Plan") through December 31, 2023 that provided eligible U.S. employees with an opportunity to save for retirement on a tax-advantaged basis. Plan participants were able to defer eligible compensation subject to applicable annual Code limits. Graphite was able to provide matching contributions under the 401(k) Plan, but did not provide any such contributions during the 2023 fiscal year. The 401(k) Plan was intended to be qualified under Section 401(a) of the Code with the 401(k) Plan's related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) Plan and earnings on those contributions were not taxable to the employees until distributed from the 401(k) Plan. Graphite terminated the 401(k) Plan on December 31, 2023.

Executive Employment Arrangements

Graphite has entered into an offer letter with each of the named executive officers in connection with his or her employment with Graphite, which set forth the terms and conditions of his or her employment. Each named executive officer has also entered into Graphite's standard proprietary information and inventions agreement.

Employment and Severance Arrangements in Place During the Fiscal Year Ended December 31, 2023 for Graphite's Named Executive Officers

Kimberlee Drapkin

On August 21, 2023, Graphite entered into an offer letter with Ms. Drapkin (the "Drapkin Letter"), for the position of interim Chief Executive Officer. The Drapkin Letter provides for Ms. Drapkin's at-will employment. Ms. Drapkin's current base salary is $550,000, which is subject to periodic review and adjustment. Ms. Drapkin is eligible to participate in the employee benefit plans generally available to Graphite's employees. The Drapkin Letter also provides that Ms. Drapkin will be entitled to cash severance payments in the amount of (i) $400,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the closing of a Strategic Transaction (as defined in the Drapkin Letter and which includes the merger), plus an additional $200,000 if the definitive agreement for such Strategic Transaction is executed within three (3) months after the Start Date or (ii) $350,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the Graphite board of directors' approval of a plan of dissolution of Graphite under Delaware law, in each case subject to Ms. Drapkin's execution and non-revocation of a separation agreement and release, as further provided in the Drapkin Letter.

In addition, in connection with Ms. Drapkin's appointment as a member of the Graphite board of directors, on July 28, 2023, Ms. Drapkin received an initial equity grant in the amount of 40,000 shares of Graphite common stock, which vests in substantial equal monthly installments over a period of three years, subject to Ms. Drapkin's continued services to Graphite. Such initial grant is subject to full accelerated vesting upon a sale of Graphite, including the merger. Ms. Drapkin did not receive any additional compensation, including cash retainers, for her services as a director.

Josh Lehrer, M.D.

On March 21, 2023, Graphite entered into a retention agreement with Dr. Lehrer (the "Lehrer Retention Agreement"), which provided for a lump sum cash payment equal to 50% of Dr. Lehrer's then-current annualized base salary, payable upon the earliest of (A) a termination by Graphite other than for "cause," as defined in the Lehrer Retention Agreement, death or disability, (B) a resignation for "good reason," as defined in the Lehrer Retention Agreement, and (C) February 22, 2024, provided that clauses (A) and (B) above shall be subject to the execution and delivery of an effective release of claims in favor of Graphite. In addition, the Lehrer Retention Agreement provided for (i) the full acceleration of vesting of 50% of any outstanding and unvested equity awards granted in 2023 to Dr. Lehrer in the event he is terminated by Graphite other than for cause or due to death or disability, or he resigns from Graphite after June 30, 2023, and (ii) an extension of the exercise period for all stock options held by Dr. Lehrer at the time his employment is terminated until the earlier of (i) 12 months following such termination and (ii) the applicable expiration date of the stock option.

On September 7, 2023, Graphite and Dr. Lehrer entered into a separation and release agreement (the "Lehrer Separation Agreement"), pursuant to which Dr. Lehrer is entitled to, in addition to the retention entitlements included in the Lehrer Retention Agreement, (i) a separation payment in the amount of $47,666.67 per month for a period of twelve (12) months and (ii) COBRA continuation coverage for twelve (12) months following August 21, 2023 (the "Termination Date"), or until he has commenced other employment and is eligible for healthcare coverage under the new employer's plan, whichever comes first.

Pursuant to the Lehrer Separation Agreement, Dr. Lehrer will continue to serve as a consultant to Graphite until the earlier of (i) twelve (12) months from the Termination Date or (ii) the date of completion of a Strategic Transaction (as defined in the Lehrer Separation Agreement and which includes the merger) (the "Post- Employment Consulting Period"). During the Post-Employment Consulting Period, Dr. Lehrer's outstanding equity awards in Graphite will continue to vest in accordance with their existing terms as in effect as of the Termination Date; provided, that in the event the Post-Employment Consulting Period ends upon the consummation of a Strategic Transaction prior to February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024 had his service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder).

Alethia Young

Ms. Young resigned as Chief Financial Officer from Graphite, effective June 30, 2023. Although she did not enter into a separation agreement with the Company upon her resignation, fifty percent (50%) of the outstanding and unvested equity awards granted in 2023 to Ms. Young were immediately vested and the post termination exercise period for all options was extended from three (3) months to twelve (12) months.

Outstanding Equity Awards at Fiscal 2023 Year-End

The following table sets forth information regarding outstanding equity awards held by Graphite's named executive officers as of December 31, 2023:

			Option Awards[1]				Stock Awards[1]	
Name	Grant Date	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)[2]
Kimberlee C. Drapkin	7/28/2023	7/28/2023	5,555 [3]	34,445	$ 2.52	7/27/2033	—	—
Josh Lehrer	4/20/2020	4/20/2020	—	—	$ —	—	55,867 [4]	146,372
	5/20/2020	4/20/2020	—	—	$ —	—	9,095 [4]	23,829
	1/13/2021	4/20/2020	—	—	$ —	—	31,168 [4][5]	81,660
	3/17/2021	3/17/2021	546,697 [6]	248,499	$ 6.11	3/16/2031	—	—
	3/17/2021	3/17/2021	234,298 [6][7]	106,500	$ 6.11	3/16/2031	—	—
	2/16/2022	1/1/2022	311,458 [6]	338,542	$ 11.02	2/15/2032	—	—
	2/21/2023	1/1/2023	450,000 [8]	150,000	$ 2.18	2/20/2033	—	—
Alethia R. Young	4/1/2022	4/1/2022	109,375	350,000	$ 5.23	7/3/2024	—	—
	2/21/2023	1/1/2023	110,000 [9]	110,000	$ 5.23	7/3/2024	—	—

(1) Each equity award is subject to the terms of Graphite's 2020 Stock Option Plan, as amended (the "2020 Plan"), or Graphite's 2021 Stock Option Plan, as amended (the "2021 Plan"). Grants made subsequent to June 24, 2021 are subject to the terms of the 2021 Plan.

(2) Based on the closing price of a share of the Graphite common stock on December 29, 2023, the last business day of the most recently completed fiscal year, which was $2.62.

(3) The shares of common stock underlying the option vest in 36 equal monthly installments following the vesting commencement date, subject to the named executive officer's continuous service relationship with Graphite through each applicable vesting date. Notwithstanding the foregoing, in connection with (and contingent on) the consummation of the merger, all unvested shares shall immediately vest and become exercisable.

(4) The shares of restricted stock vest as follows: 25% of the shares on the first anniversary of the vesting commencement date and the remaining 75% in 36 equal monthly installments thereafter, subject to the named executive officer's continuous service relationship with Graphite through each applicable vesting date, including his continuous service relationship as a consultant to Graphite. During his post-employment consulting period, Dr. Lehrer's outstanding equity awards will continue to vest in accordance with the foregoing terms; provided, that in the event the consummation of the merger occurs prior to February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024 had Dr. Lehrer's service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder). The foregoing vesting schedule is discussed further in the section of this proxy statement/prospectus titled "*Graphite* Executive Compensation—*Narrative to 2023 Summary Compensation Table—Executive Employment Arrangements—Josh Lehrer, M.D.*" above.

(5) The named executive officer received an early exercisable stock option award, which the named executive officer early exercised in its entirety.

(6) The shares of Graphite common stock underlying the option vest in 48 equal monthly installments following the vesting commencement date, subject to the named executive officer's continuous service relationship with Graphite through each applicable vesting date. Notwithstanding the foregoing, during his post-employment consulting period, Dr. Lehrer's outstanding equity awards shall continue to vest in accordance with the foregoing terms; provided, that in the event the consummation of the merger occurs prior to February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024 had Dr. Lehrer's service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder). The foregoing vesting schedule is discussed further in the section of this proxy statement/prospectus titled "*Graphite* Executive Compensation—*Narrative to 2023 Summary Compensation Table—Executive Employment Arrangements—Josh Lehrer, M.D.*" above.

(7) The option was granted subject to the achievement by Graphite of performance vesting criteria. On June 29, 2021, the performance vesting criteria was met such that the option became subject to time-based vesting in accordance with the vesting schedule described in footnote (6) above.

(8) The shares of common stock underlying the option vest in 48 equal monthly installments following the vesting commencement date, subject to the named executive officer's continuous service relationship with the Company through each applicable vesting date. Notwithstanding the foregoing, pursuant to the Lehrer Separation Agreement, 50% of the unvested shares underlying such option

accelerated upon his termination with Graphite (i.e., August 21, 2023), and the remaining unvested shares shall continue to vest during his post-employment consulting period in accordance with the foregoing vesting terms; provided, that in the event the consummation of the merger occurs prior February 21, 2024, Graphite shall accelerate the vesting of a number of shares equal to the number of shares subject to Dr. Lehrer's equity awards that would otherwise have vested through February 21, 2024 had Dr. Lehrer's service relationship with Graphite continued through such period (or such lesser amount then remaining unvested thereunder). The foregoing vesting schedule is discussed further in the section of this proxy statement/prospectus titled "*Graphite Executive Compensation—Narrative to 2023 Summary Compensation Table—Executive Employment Arrangements—Josh Lehrer, M.D.*" above.

(9) The shares of common stock underlying the option vest in 48 equal monthly installments following the vesting commencement date, subject to Ms. Young's continuous service relationship with the Company through each applicable vesting date. Notwithstanding the foregoing, upon Ms. Young's resignation, fifty percent (50%) of the unvested shares underlying such option accelerated and the remaining unvested shares of Graphite common stock were forfeited.

GRAPHITE DIRECTOR COMPENSATION

Non-Employee Director Advisor Agreement

Graphite has entered into an advisor agreement with Dr. Porteus as one of Graphite's founders. The material terms of his advisor agreement are summarized below.

Matthew Porteus, M.D., Ph.D.

On March 24, 2020, Graphite entered into an advisory agreement with Dr. Porteus (the "Porteus Agreement"), pursuant to which he serves on Graphite's Scientific & Clinical Advisory Board and among other things, provides consulting services to Graphite involving the development of techniques and improvements in the field of clustered regularly interspaced short palindromic repeats or CRISPR, cell and gene therapy and derivatives technologies for the prevention and treatment of human disease, assists Graphite in reviewing goals and developing strategies for achieving such goals, advises on scientific research and supports the recruitment of personnel in Graphite's research and product development activities. As consideration for such services, Dr. Porteus is entitled to receive an annual retainer of $70,000, subject to his performance of services for nine (9) days per quarter. Furthermore, Dr. Porteus received a restricted stock grant of up to 3,819,901 shares, subject to reduction based on Graphite's issuance of common stock to Stanford, as set forth in the applicable restricted stock purchase agreement. The shares of restricted stock are subject to a four (4) year vesting schedule (up to 25% of the total amount of shares granted (to the extent not previously vested) will vest on June 24, 2021, the first anniversary of the date on which Graphite sold preferred stock with aggregate proceeds of at least $10 million, and the remaining 75% vests in equal monthly installments thereafter, subject to continued service through each such date); provided, that 364,884 shares vested on June 10, 2020 upon Graphite's execution of a term sheet for a license with Stanford and 100% of the then-unvested shares will vest upon a "change in control" (as defined in the Porteus Agreement) subject to Dr. Porteus remaining in continued service through such date. The Porteus Agreement also provides for reimbursement of travel and out-of-pocket expenses incurred by Dr. Porteus in providing services at Graphite's request, with any expense in excess of $500 per month requiring pre-approval by Graphite. Pursuant to the Porteus Agreement, Dr. Porteus is subject to certain standard assignment of intellectual property and confidentiality covenants, as well as twenty-four (24) month post-termination non-solicitation of employees, consultants and customers restrictive covenants.

Non-Employee Director Compensation Policy

Graphite has adopted a non-employee director compensation policy to enable Graphite to attract and retain, on a long-term basis, highly qualified non-employee directors. Under the policy, Graphite's non-employee directors are eligible to receive cash retainers (which are payable quarterly in arrears and prorated for partial years of service) and equity awards as set forth below:

Annual Retainer for Board Membership	
$35,000 for general availability and participation in meetings and conference calls of Graphite's board of directors	
Additional Annual Retainer for Committee Membership	
Audit Committee Chairperson:	$ 15,000
Audit Committee member (other than Chairperson):	$ 7,500
Compensation Committee Chairperson:	$ 10,000
Compensation Committee member (other than Chairperson):	$ 5,000
Nominating and Corporate Governance Committee Chairperson:	$ 8,000
Nominating and Corporate Governance Committee member (other than Chairperson):	$ 4,000
Science & Technology Committee Chairperson:	$ 10,000
Science & Technology Committee member (other than Chairperson):	$ 5,000
Additional Retainer for Non-Executive Chairperson of the Board:	$ 30,000

In addition, Graphite's policy provides that, upon initial election or appointment to the Graphite board of directors, each new non-employee director will be granted a one-time grant of a non-statutory stock option to purchase 40,000 shares of Graphite common stock on the date of such director's election or appointment to the Graphite board of directors (the "Director Initial Grant"). The Director Initial Grant will vest in substantially equal monthly installments over three years, subject to the non-employee director's continued services to Graphite. On the date of each annual meeting of stockholders of Graphite, each non-employee director who will continue as a non-employee director following such meeting will be granted an annual award of a non-statutory stock option to purchase 20,000 shares of Graphite common stock, (the "Director Annual Grant"). The Director Annual Grant will vest in full on the earlier of the one-year anniversary of the grant date or on the date of Graphite's next annual meeting of stockholders, subject to the non-employee director's continued services to Graphite. If a new non-employee director joins the Graphite board of directors on a date other than the date of Graphite's annual meeting of stockholders, then in lieu of the Director Annual Grant above, such non-employee director will be granted a pro-rata portion of the Director Annual Grant at the next annual meeting of stockholders based on the time between such non-employee director's appointment and such next annual meeting of stockholders. The Director Initial Grant and Director Annual Grant are subject to full acceleration vesting upon the sale of Graphite.

The aggregate amount of compensation, including both equity compensation and cash compensation, paid to any non-employee director for service as a non-employee director in a calendar year period will not exceed $1,000,000 in the first calendar year such individual becomes a non-employee director and $750,000 in any other calendar year.

Graphite will reimburse all reasonable out-of-pocket expenses incurred by directors for their attendance at meetings of the Graphite board of directors or any committee thereof.

Employee directors will receive no additional compensation for their service as a director.

Director Compensation Table

The following table presents the total compensation for each of Graphite's non-employee directors who served as a member of the Graphite board of directors during the fiscal year ended December 31, 2023. Ms. Drapkin, who serves as Graphite's Interim President and Chief Executive Officer, received an initial equity grant in the amount of 40,000 shares, which is presented in the "2023 Outstanding Equity Awards at Fiscal 2023 Year-End" in the "Graphite Executive Compensation" section above, but did not receive any additional compensation for her service as a director. Dr. Lehrer, who previously served as Graphite's President and Chief Executive Officer, did not receive any additional compensation for his service as a director. The compensation received by Ms. Drapkin and Dr. Lehrer, as named executive officers of Graphite, is presented in the "2023 Summary Compensation Table" in the "Graphite Executive Compensation" section above. Other than as set forth in the table and described more fully below, Graphite did not pay any compensation, make any equity awards to or reimburse any expenses of, any of Graphite's non-employee directors in 2023.

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
Abraham Bassan(2)	$ 45,000	$ 38,398	$ —	$ 83,398
Jerel Davis, Ph.D.(3)	$ 46,500	$ 38,398	$ —	$ 84,898
Kristen M. Hege, M.D.(4)	$ 45,000	$ 38,398	$ —	$ 83,398
Joseph Jimenez(5)	$ 46,500	$ 38,398	$ —	$ 84,898
Perry Karsen(6)	$ 78,000	$ 38,398	$ —	$ 116,398
Matthew Porteus, M.D., Ph.D.(7)	$ 40,000	$ 38,398	$ 70,000 (8)	$ 148,398
Carlo Rizzuto, Ph.D.(9)	$ 45,000	$ 38,398	$ —	$ 83,398
Smital Shah(10)	$ 50,000	$ 38,398	$ —	$ 88,398
Jo Viney, Ph. D.(11)	$ 45,000	$ 38,398	$ —	$ 83,398

(1) The amounts reported represent the aggregate grant date fair value of the stock options granted to Graphite's directors during the 2023 fiscal year, calculated in accordance with FASB ASC Topic 718. Such grant date fair values do not take into account any estimated forfeitures. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in notes 2 and 11 to Graphite's financial statements included herein for the year ended December 31, 2023. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by Graphite's directors upon the exercise of the stock options or any sale of the underlying shares of Graphite common stock.
(2) As of December 31, 2023, Mr. Bassan held Graphite options to purchase an aggregate of 80,000 shares of Graphite common stock.
(3) As of December 31, 2023, Dr. Davis held Graphite options to purchase an aggregate of 80,000 shares of Graphite common stock.
(4) As of December 31, 2023, Dr. Hege held Graphite options to purchase an aggregate of 133,585 shares of Graphite common stock.
(5) As of December 31, 2023, Mr. Jimenez held (i) 153,815 shares of restricted stock from the early exercise of his Graphite options and (ii) Graphite options to purchase an aggregate of 52,469 shares of Graphite common stock.
(6) As of December 31, 2023, Mr. Karsen held (i) 155,908 shares of restricted stock from the early exercise of his Graphite options and (ii) Graphite options to purchase an aggregate of 133,492 shares of common stock
(7) As of December 31, 2023, Dr. Porteus held (i) 3,528,529 shares of founder restricted stock and (ii) Graphite options to purchase an aggregate of 40,000 shares of Graphite common stock.
(8) Amount represents the advisor fees earned by Dr. Porteus during the fiscal year ended December 31, 2023.
(9) As of December 31, 2023, Dr. Rizzuto held Graphite options to purchase an aggregate of 80,000 shares of Graphite common stock.
(10) As of December 31, 2023, Ms. Shah held Graphite options to purchase an aggregate of 133,585 shares of Graphite common stock.
(11) As of December 31, 2023, Dr. Viney held Graphite options to purchase an aggregate of 133,585 shares of Graphite common stock.

GRAPHITE EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2023 with respect to the shares of Graphite common stock that may be issued under Graphite's equity compensation plans.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights[1]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities in first column)
Plan Category			
Equity compensation plans approved by security holders[2]	5,376,373	$ 6.58	10,798,817 [3]
Equity compensation plans not approved by security holders	—	$ —	—
Total	5,376,373	$ 6.58	10,798,817

(1) The weighted average exercise price is calculated based Graphite on outstanding stock options.
(2) Includes the following plans: the 2021 Plan, the 2020 Plan, and Graphite's 2021 Employee Stock Purchase Plan (the "2021 ESPP").
(3) As of December 31, 2023, a total of 10,908,192 shares of Graphite common stock have been reserved for issuance pursuant to the 2021 Plan, which number excludes the 2,900,419 shares that were added to the plan as a result of the automatic annual increase on January 1, 2024. The number of shares of Graphite common stock reserved and available for issuance under the 2021 Plan is subject to an automatic annual increase on each January 1, beginning January 1, 2022, by an amount equal to the lesser of: (i) 5% of the number of shares of Graphite common stock issued and outstanding on the immediately preceding December 31, and (ii) such lesser number of shares of Graphite common stock as determined by the Graphite board of directors or its compensation committee. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in Graphite's capitalization. The shares of Graphite common stock underlying any awards that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by Graphite prior to vesting, satisfied without the issuance of stock, expire or are otherwise terminated, other than by exercise, under the 2021 Plan and the 2020 Plan will be added back to the shares of Graphite common stock available for issuance under the 2021 Plan. Graphite no longer makes grants under the 2020 Plan. As of December 31, 2023, a total of 1,253,729 shares of Graphite common stock have been reserved for issuance pursuant to the 2021 ESPP, which number excludes the 564,000 shares that were added to the plan as a result of the automatic annual increase on January 1, 2024. The number of shares of Graphite common stock reserved and available for issuance under the 2021 ESPP is subject to an automatic annual increase on each January 1, beginning January 1, 2022, by an amount equal to the least of: (i) 564,000 shares of common stock, (ii) 1% of the number of shares of Graphite common stock issued and outstanding on the immediately preceding December 31, and (iii) such lesser number of shares of Graphite common stock as determined by the Graphite board of directors or its compensation committee. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in Graphite's capitalization.

LENZ EXECUTIVE COMPENSATION

This discussion may contain forward-looking statements that are based on the combined company's current plans, considerations, expectations, and determinations regarding future compensation programs. Actual compensation programs that the combined company may adopt following the completion of the merger may differ materially from historical and the currently planned programs summarized in this discussion. All share counts in this section are shown on a pre-merger basis.

Following completion of the merger, certain executive officers of LENZ will become executive officers of the combined company. This section sets forth historical compensation for LENZ's named executive officers, consisting of its principal executive officer and the two most highly compensated executive officers (other than LENZ's principal executive officer), as of December 31, 2023, each of whom is expected to become an executive officer of the combined company, who were:

- Evert Schimmelpennink, LENZ's President and Chief Executive Officer;
- Shawn Olsson, LENZ's Chief Commercial Officer; and
- Marc Odrich, LENZ's Chief Medical Officer.

Summary Compensation Table for Fiscal 2023

The following table sets forth information regarding the compensation awarded to, earned by or paid to LENZ's named executive officers for the fiscal year ended December 31, 2023:

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Option Awards ($)(2)	All Other Compensation ($)(3)	Total ($)
Evert Schimmelpennink	2023	537,438(4)	335,898	1,630,871	13,200	2,517,407
President and Chief Executive Officer	2022	508,250	304,950	325,246	12,200	1,150,646
Shawn Olsson	2023	360,997(5)	157,936	262,887	13,200	795,020
Chief Commercial Officer	2022	342,063	123,143	120,087	12,200	597,493
Marc Odrich, M.D.	2023	410,000	153,750	343,213	13,200	920,163
Chief Medical Officer	2022	269,127	96,886	120,087	11,550	497,650

(1) The amounts reported represent discretionary bonuses paid in 2023 and 2024 based upon the achievement of company goals for the years ended December 31, 2022 and 2023, as determined by the LENZ board of directors. For additional information regarding these amounts, see the section of this proxy statement/prospectus titled "*LENZ Executive Compensation—Narrative disclosure to Summary Compensation Table for Fiscal 2023—2023 Annual Cash Bonuses*" below.

(2) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2022 and 2023, computed in accordance with FASB ASC Topic 718, Compensation—Stock Compensation. The assumptions used in calculating the grant date fair value of the awards disclosed in this column are set forth in Note 10 to LENZ's audited financial statements included elsewhere in this proxy statement/prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(3) The amounts reported represent matching contributions under LENZ's 401(k) plan.

(4) The amount reported reflects the total salary earned by Mr. Schimmelpennink in 2023. Mr. Schimmelpennink's annual base salary was $513,000 from January 1, 2023 until January 31, 2023 and was increased to an annual base salary of $538,500 on February 1, 2023.

(5) The amount reported reflects the total salary earned by Mr. Olsson in 2023. Mr. Olsson's annual base salary was $344,500 from January 1, 2023 until January 31, 2023 and was increased to an annual base salary of $361,725 on February 1, 2023.

Narrative Disclosure to Summary Compensation Table for Fiscal 2023

Base Salary

See the footnotes to the Summary Compensation Table for Fiscal 2023 above for information on the base salaries of LENZ's named executive officers in effect during fiscal year ended 2023.

2023 Annual Cash Bonuses

Each of LENZ's named executive officers is eligible to participate in an annual cash incentive compensation program which provides participants with an opportunity to earn variable cash incentive compensation based on individual and company performance. For 2023, Mr. Schimmelpennink's target bonus was 50% of his base salary, Mr. Olsson's target bonus was 35% of his base salary, and Dr. Odrich's target bonus was 30% of his base salary.

The determination of the 2023 bonus amount was discretionary based on the LENZ board of directors assessment of company performance against corporate goals.

The actual annual cash bonuses awarded to each named executive officer for 2023 performance are set forth above in the "Bonus" column of LENZ's Summary Compensation Table for Fiscal 2023 above.

Outstanding Equity Awards at Fiscal 2023 Year-End

The following table sets forth information regarding outstanding equity awards held by LENZ's named executive officers as of December 31, 2023.

		Option Awards [1]				Stock Awards	
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($) [2]	Option Expiration Date	Number of Shares or Units of Stock that have not Vested (#)	Market Value of Shares or Units of Stock that have not Vested ($)
Evert Schimmelpennink	3/8/2021	1,316,198	598,273(3)	$ 0.21	3/7/2031	—	—
	11/24/2022	281,266	127,849(3)	$ 1.02	11/23/2032	—	—
	6/20/2023	—	1,562,137[4]	$ 1.22	6/19/2033	—	—
Shawn Olsson	8/19/2021	224,115	112,058[5]	$ 0.42	8/18/2031	—	—
	11/24/2022	100,449	50,225[5]	$ 1.02	11/23/2032	—	—
	6/20/2023	—	251,807[4]	$ 1.22	6/19/2033	—	—
Marc Odrich	8/19/2021	—	—	—	—	96,777[6]	$184,844[7]
	11/24/2022	—	—	—	—	78,415[8]	$149,773[7]
	6/20/2023	—	328,748[4]	$ 1.22	6/19/2033	—	—

(1) All of the outstanding stock option awards were granted under and subject to the terms of the LENZ 2020 Equity Incentive Plan.

(2) The stock option awards were granted with a per share exercise price equal to the fair market value of one share of LENZ common stock on the date of grant, as determined in good faith by its board of directors based on third party valuations of its common stock.

(3) Twenty-five percent of the shares subject to the option vested on March 8, 2022, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to Mr. Schimmelpennink continuing to be a service provider to LENZ through each such date. All of the shares underlying the option are subject to an early exercise provision pursuant to which Mr. Schimmelpennink may exercise the option for shares of restricted stock subject to LENZ's right to repurchase such shares that lapses on the same vesting schedule as would have applied to such shares under the option. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger – Executive Change in Control and Severance Policy*."

(4) Twenty-five percent of the shares subject to the option shall vest on March 6, 2024, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to the named executive officer continuing to be a service provider to LENZ through each such date. All of the shares underlying the option are subject to an early exercise provision pursuant to which such named executive officer may exercise the option for shares of restricted stock subject to LENZ's right to repurchase such shares that lapses on the same vesting schedule as would have applied to such shares under the option. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled *"Interests of LENZ's Directors and Executive Officers in the Merger – Executive Change in Control and Severance Policy."*

(5) Twenty-five percent of the shares subject to the option vested on April 26, 2022, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to Mr. Olsson continuing to be a service provider to LENZ through each such date. All of the shares underlying the option are subject to an early exercise provision pursuant to which Mr. Olsson

may exercise the option for shares of restricted stock subject to LENZ's right to repurchase such shares that lapses on the same vesting schedule as would have applied to such shares under the option. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger – Executive Change in Control and Severance Policy*."

(6) Represents restricted stock obtained on January 28, 2022 upon exercise of an early exercise option. Twenty-five percent of the shares subject to the option vested on July 1, 2022, and 1/36th of the remaining shares subject to the award shall vest monthly in equal installments on the 1st of each month, through July 1, 2025. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger – Executive Change in Control and Severance Policy*."

(7) This amount reflects the fair market value of the LENZ common stock of $1.91 as of December 31, 2023 (based on the determination of the fair market value by the LENZ board of directors as of the most proximate date) multiplied by the amount shown in the column for the number of shares or units of stock that have not vested.

(8) Represents restricted stock obtained on December 30, 2022 upon exercise of an early exercise option. Twenty-five percent of the shares subject to the option vested on July 1, 2022, and 1/36th of the remaining shares subject to the award shall vest monthly in equal installments on the 1st of each month, through July 1, 2025. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger – Executive Change in Control and Severance Policy*."

Employment Arrangements with LENZ's Named Executive Officers

The LENZ board of directors approved a confirmatory employment letter with each of its current executive officers, including Mr. Schimmelpennink, Mr. Olsson, and Dr. Odrich and recommend that the Graphite board of directors approve the employment letters to become effective upon closing of the merger. Each confirmatory employment letter will provide for continued employment with the combined company on an at-will basis and include terms for base salary, benefits and target cash incentive payments. For a summary of the material terms of the confirmatory offer letters, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger—Executive Offer Letters*" beginning on page 188 of this proxy statement/prospectus.

Each of LENZ's current executive officers has executed its standard form of confidential information, invention assignment and arbitration agreement.

Equity Based Incentive Awards

LENZ's equity-based incentive awards are designed to more closely align its interests and those of its stockholders with those of LENZ's employees and consultants, including its named executive officers. The LENZ board of directors is responsible for approving equity grants to its employees and consultants, including its named executive officers. In 2023, stock option awards were the only form of equity awards granted to its named executive officers. LENZ has granted equity incentive awards under the terms of the LENZ 2020 Equity Incentive Plan. The terms of the LENZ 2020 Equity Incentive Plan are described below under "*Employee Benefit and Stock Plans—2020 Equity Incentive Plan*."

All options are granted with an exercise price per share that is no less than the fair market value of a share of LENZ common stock on the date of grant of such award, as determined in good faith by the LENZ board of directors. LENZ's stock option awards generally vest over a four-year period and may be subject to acceleration of vesting and exercisability under certain termination and change in control events. See the section of this proxy statement/prospectus titled "*—Outstanding Equity Awards at Fiscal 2023 Year-End*."

Potential Payments upon Termination or Change of Control

The LENZ board of directors approved a Severance Policy to provide certain severance and change in control benefits to its executive officers and other key employees, including Mr. Schimmelpennink, Mr. Olsson, and Dr. Odrich, and recommend that Graphite's board of directors approve the Severance Policy to become

effective upon closing of the merger. For a summary of the material terms of the Severance Policy, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger—Executive Change in Control and Severance Policy*."

Employee Benefit and Stock Plans

LENZ believes that performance and equity-based compensation can be an important component of the total executive compensation package for supporting stockholder value creation while, at the same time, attracting, motivating, and retaining high-quality executives. Formal guidelines for the allocations of cash and equity-based compensation have not yet been determined, but it is expected that the combined company's 2024 Equity Incentive Plan described in the 2024 Plan Proposal, if approved, will be an important element of its compensation arrangements for both executive officers and directors, and that the executive officers will also be eligible to participate in the 2024 ESPP described in the 2024 ESPP Proposal, if approved.

2020 Equity Incentive Plan

LENZ's 2020 Equity Incentive Plan was adopted by its board of directors on October 30, 2020 and approved by stockholders on November 3, 2020. The plan provides for the grant of incentive stock options to employees, including employees who are also directors, within the meaning of Section 422 of the Code, and for the grant of nonstatutory stock options, and stock rights which may be granted to employees, directors and consultants.

At the effective time of the merger, pursuant to the terms of the Merger Agreement, Graphite will assume all outstanding and unexercised stock options granted under LENZ's 2020 Equity Incentive Plan in accordance with the terms of the plan and the applicable stock option agreements evidencing such LENZ options.

In connection with the closing of the merger, it is expected that LENZ's 2020 Equity Incentive Plan will be terminated and LENZ will not grant any additional awards under the plan following its termination. However, LENZ's 2020 Equity Incentive Plan will continue to govern the terms and conditions of the outstanding awards previously granted under LENZ's 2020 Equity Incentive Plan. The material terms of LENZ's 2020 Equity Incentive Plan are summarized below.

As of December 31, 2023, stock options covering 9,317,290 shares of LENZ Class A common stock were outstanding under LENZ's 2020 Equity Incentive Plan and there were no stock appreciation rights or restricted stock units outstanding under the plan. As of December 31, 2023, there were 175,192 shares of restricted Class A common stock outstanding, which were issued upon the early exercise of stock options under LENZ's 2020 Equity Incentive Plan.

Authorized Shares. Subject to the adjustment provisions in LENZ's 2020 Equity Incentive Plan, the maximum aggregate number of shares of Class A common stock that may be granted under LENZ's 2020 Equity Incentive Plan is 11,385,409 shares of LENZ's Class A common stock. The shares may be authorized, but unissued, or reacquired Class A common stock.

If an award expires or becomes unexercisable for any reason without having been exercised in full, or is surrendered pursuant to a program approved by the administrator of LENZ's 2020 Equity Incentive Plan where outstanding stock options can be exchanged for stock options with a lower exercise price or amended to decrease the exercise price, the unpurchased shares that were subject thereto shall, unless LENZ's 2020 Equity Incentive Plan has been terminated, become available for future grant under the plan. In addition, any shares which are retained by LENZ upon exercise of an award in order to satisfy the exercise or purchase price for that award or any withholding taxes due with respect to such exercise or purchase will be treated as not issued and will continue to be available under plan. LENZ's 2020 Equity Incentive Plan also provides that shares of Class A common stock issued under the plan and later forfeited to LENZ or repurchased by it for the lesser of the exercise price or fair market value at date of repurchase, pursuant to any repurchase right which LENZ may have, will be available for future grant under LENZ's 2020 Equity Incentive Plan.

Plan Administration. LENZ's 2020 Equity Incentive Plan is administered by its board of directors or a committee of its board of directors, or a combination thereof, as determined by its board of directors. Any committee appointed by the board of directors to administer LENZ's 2020 Equity Incentive Plan may, from time to time, be increased by the board of directors, which may appoint additional members or remove members of the committee with or without cause, including removing all members and directly administering LENZ's 2020 Equity Incentive Plan. The LENZ board of directors may also authorize one or more officers to make awards under the plan, if permitted by applicable law.

Subject to the provisions of LENZ's 2020 Equity Incentive Plan, the administrator will have the power to administer LENZ's 2020 Equity Incentive Plan, including but not limited to: the power to determine the fair market value of LENZ's Class A common stock in accordance with the provisions of LENZ's 2020 Equity Incentive Plan; select the employees and consultants (including directors) to whom awards may from time to time be granted; determine whether and to what extent awards are granted; determine the number of shares of Class A common stock covered by each award; approve forms of award agreements for use under LENZ's 2020 Equity Incentive Plan; determine the terms and conditions not inconsistent with the terms of LENZ's 2020 Equity Incentive Plan of any award granted, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, any pro rata adjustment to vesting as a result of a holder of an award's transitioning from full-to part-time service (or vice versa), and any restriction or limitation regarding any stock option, optioned stock, stock right or restricted stock, based in each case on such factors as the administrator determines; determine whether and under what circumstances a stock option may be settled in cash under the provisions of LENZ's 2020 Equity Incentive Plan instead of Class A common stock; implement a program approved by the administrator of LENZ's 2020 Equity Incentive Plan where outstanding stock options can be exchanged for stock options with a lower exercise price or amended to decrease the exercise price on such terms and conditions as the administrator in its discretion deems appropriate, provided that no amendment or adjustment to a stock option that would materially and adversely affect the rights of a holder of a stock option shall be made without the prior written consent of the holder of that stock option; adjust the vesting of a stock option held by an employee, director or consultant as a result of a change in the terms or conditions under which such person is providing services to LENZ; construe and interpret the terms of LENZ's 2020 Equity Incentive Plan and awards granted under it; without amending LENZ's 2020 Equity Incentive Plan, modify grants of stock options or stock rights to any holder of stock options or stock rights who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies, or customs. The administrator's constructions, interpretations, and decisions will be final and binding on all participants.

Stock Options. LENZ's 2020 Equity Incentive Plan permits the grant of stock options. Incentive stock options may be granted only to employees, including employees who are also directors. Each stock option shall be designated in an option agreement as either an incentive stock option or a nonstatutory stock option. The maximum number of shares of Class A common stock with respect to which incentive stock options may be granted under LENZ's 2020 Equity Incentive Plan is 11,385,409.

The term of each stock option shall be the term stated in the applicable option agreement; provided that the term shall be no more than ten years from the date of grant, or such shorter term as may be provided in the option agreement. In the case of an incentive stock option granted to a person who at the time of such grant owns more than ten percent of the voting power of all classes of LENZ's outstanding stock, the term of the stock option shall be five years from the date of grant or such shorter term as may be provided in the applicable option agreement.

The per share exercise price of options granted under LENZ's 2020 Equity Incentive Plan will be a price determined by the administrator that is set forth in the applicable option agreement. In the case of incentive stock options granted to an employee who at the time of grant, owns more than ten percent of the voting power of all classes of LENZ's outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least one-hundred ten percent of the fair market value of

LENZ's Class A common stock on the grant date. In the case of nonstatutory stock options granted on any date on which its Class A common stock is not a security of LENZ's that is listed or approved for listing on a national securities exchange or designated or approved for designation as a national market system security on an interdealer quotation system by the Financial Industry Regulatory Authority, Inc. (a "Listed Security"), the per share exercise price will be the price determined by the Administrator; or granted on any date on which the Class A common stock is a Listed Security to any eligible person, the per share exercise price shall be a price determined by the administrator based on the closing price of LENZ's Class A common stock for the applicable date. No nonstatutory stock option will be granted with a per share exercise price less than one-hundred percent of the fair market value on the date of grant unless the administrator explicitly designates such as a discounted option with terms intended to avoid additional taxes under Section 409A of the Code.

The administrator determines the consideration to be paid for shares issued upon exercise of a stock option, including the methods of payment (in the case of incentive stock options this will be determined at the time of grant), which may include cash, check, delivery of a promissory note having recourse, interest, security and redemption provisions determined by the administrator, other shares that have a fair market value on the date of surrender equal to the aggregate exercise price of the shares to which the stock option is exercised (provided that in the case of shares provided directly or indirectly by LENZ, the shares must have been owned for more than six months on the date of surrender (or such period as may be required for securities law purposes to avoid LENZ incurring an adverse accounting charge); by net exercise or by a cashless exercise method, including a broker-assisted cashless exercise; any combination thereof; or any other consideration or method of payment acceptable to the administrator, to the extent permitted by applicable law.

The administrator will establish in the applicable option agreement the terms and conditions in which a stock option will remain exercisable, if at all, following termination of a participant. Unless the administrator provides in the applicable option agreement, if an option holder does not exercise their stock option to the extent they are entitled to do so within the time specified in their option agreement, the stock option will terminate and the optioned stock underlying the unexercised portion of the stock option will revert to LENZ's 2020 Equity Incentive Plan. If an employee, director or consultant is terminated other than for death, disability or for cause, the option holder may exercise their option for ninety days following their termination to the extent they are vested in the optioned stock (they may exercise their stock option for twelve months in the event of termination due to disability or death). If terminated for cause, a participant's stock options will immediately terminate in their entirety.

Stock Rights. LENZ's 2020 Equity Incentive Plan permits the grant of stock rights. A stock right is the right to acquire LENZ's Class A common stock pursuant to LENZ's 2020 Equity Incentive Plan. The administrator will advise a participant in writing of the terms, conditions and restrictions related to the stock right, including the number of shares that the participant will be entitled to acquire, the price to be paid, and the time within which the participant must accept such offer. The offer to purchase shares subject to a stock right will be accepted by execution of a restricted stock agreement in the form determined by the administrator. The restricted stock agreement will grant LENZ a repurchase option exercisable upon the voluntary or involuntary termination of the participant's employment or other service arrangement with LENZ for any reason (including death or disability), unless determined otherwise by the administrator.

If the participant is terminated for cause, LENZ will have the right to repurchase from the participant any vested shares derived from a stock right prior to the date, if any, upon which LENZ's Class A common stock becomes a Listed Security. LENZ's right to repurchase such shares upon termination of such participant's service for cause shall be made at the lower of (A) the participant's original cost for the shares and (B) the fair market value of the shares as of the date of termination, and shall be effected pursuant to such terms and conditions, and at such time, as the administrator shall determine.

Non-Transferability of Awards. LENZ's 2020 Equity Incentive Plan generally does not allow stock options, stock rights or shares issued upon the exercise of either to be sold, pledged, assigned, hypothecated, transferred

or disposed of in any manner other than by will, or by the laws of descent or distribution, except as set forth in LENZ's 2020 Equity Incentive Plan. The administrator may, in its discretion, grant nonstatutory stock options that may be transferred by instrument to an inter vivos or testamentary trust in which the stock options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or pursuant to domestic relations orders to immediate family members of the holder of the stock option.

Certain Adjustments. Subject to any action required under applicable law, in the event of a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of LENZ's Class A common stock, or any other increase or decrease in the number of issued shares without receipt of consideration by LENZ, a proportionate adjustment will be made in the number of shares covered by each outstanding award, and the number of shares that have been authorized for issuance under LENZ's 2020 Equity Incentive Plan but as to which no awards have yet been granted or that have been returned to LENZ's 2020 Equity Incentive Plan upon cancellation or expiration of an award, as well as the price per share covered by each such outstanding award. The adjustment will be made by the administrator, whose determination will be final, binding and conclusive.

Dissolution or Liquidation. In the event of LENZ's liquidation or dissolution, each stock option or stock right will terminate immediately prior to the consummation of such event, unless determined otherwise by the administrator.

Change of Control. LENZ's 2020 Equity Incentive Plan provides that in the event of a change of control, as defined under the plan, the LENZ board of directors or a committee appointed by its board of directors may provide for: (1) the acceleration in part or whole of the right to exercise a stock option or the vesting of any award; (2) the assumption or substitution of, or adjustment to, each outstanding stock option by the successor corporation or a parent or subsidiary of the successor corporation; (3) the termination of any stock option not exercised within a specified period of notice of such termination; and/or (4) termination of stock options as a result of the change of control on such other terms and conditions as it deems appropriate, including providing for the cancellation of stock options for a cash payment to the participant. The plan's administrator does not have to provide for identical treatment of each outstanding award in connection with a merger or change in control.

In the event of any distribution to LENZ stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the company) without receipt of consideration by LENZ, the administrator may, in its discretion, adjust the price per share of LENZ's Class A common stock covered by each outstanding stock option or stock right to reflect the effect of such distribution.

Amendment and Termination. The LENZ board of directors may at any time amend, alter, suspend or discontinue LENZ's 2020 Equity Incentive Plan, provided LENZ will obtain stockholder approval of any amendment to the extent necessary or desirable to comply with applicable laws. However, no amendment, alteration, suspension or discontinuation of LENZ's 2020 Equity Incentive Plan or an award under it may materially and adversely affect the rights of any participant with respect to an outstanding award without the participant's consent, except for adjustments pursuant to the plan's provisions regarding adjustments upon change in capitalization, merger or certain other transactions. LENZ's 2020 Equity Incentive Plan will continue in effect for a term of ten years unless terminated sooner.

Executive Incentive Compensation Plan

Prior to the completion of the merger, the LENZ board of directors intends to approve the Incentive Compensation Plan to provide periodic incentive bonus opportunities to the employees of the combined company, and recommend that Graphite's board of directors approve the Incentive Compensation Plan to become effective upon closing of the merger. It is expected that LENZ's named executive officers will be eligible to participate in the Incentive Compensation Plan. For a summary of the material terms of the Incentive Compensation Plan, please see the section of this proxy statement/prospectus above titled "*Interests of LENZ's Directors and Executive Officers in the Merger – Employee Incentive Compensation Plan*".

401(k) Plan

LENZ maintains a 401(k) retirement savings plan, which is intended to be a tax qualified defined contribution plan under Section 401(k) of the Code, for the benefit of its employees, including certain of its named executive officers, who satisfy certain eligibility requirements. Under the 401(k) plan, eligible employees may elect to defer a portion of their compensation, within the limits prescribed by the Code, on a pre-tax (traditional) or post-tax (Roth) basis, through contributions to the 401(k) plan. As a tax-qualified retirement plan, pre-tax contributions to the 401(k) plan and earnings on those pre-tax contributions are not taxable to the employees until distributed from the 401(k) plan, and earnings on Roth contributions are not taxable when distributed from the 401(k) plan.

The 401(k) plan authorizes employer safe harbor matching contributions and discretionary profit-sharing contributions. LENZ makes matching contributions under the 401(k) plan on behalf of its employees who are eligible to participate in the 401(k) plan. Matching contributions follow certain safe harbor provisions, pursuant to which LENZ makes a matching contribution equal to 100% of an eligible employee's contributions which do not exceed 3% of such employee's compensation, plus 50% of an eligible employee's contributions which exceed 3% but not 5% of such employee's compensation. LENZ also may choose to make profit-sharing contributions to its employees who are eligible to participate in the 401(k) plan. Profit-sharing contributions may be provided at LENZ's sole discretion, and may be allocated so that each participant receives a different amount of profit-sharing as long as the contributions comply with IRS nondiscrimination requirements. Participants are always 100% immediately vested in safe harbor matching and profit sharing contributions under the 401(k) plan. LENZ did not make any profit sharing contributions under the 401(k) plan during 2023. The matching contributions made to LENZ's named executive officers in 2023 are set forth in the "All Other Compensation" column of the Summary Compensation Table for Fiscal 2023 above.

LENZ DIRECTOR COMPENSATION

This discussion may contain forward-looking statements that are based on the combined company's current plans, considerations, expectations, and determinations regarding future compensation programs. Actual compensation programs that the combined company may adopt following the completion of the merger may differ materially from historical and the currently planned programs summarized in this discussion. All share counts in this section are shown on a pre-merger basis.

LENZ has not implemented a formal policy with respect to compensation payable to its non-employee directors and none of its non-employee directors received any compensation for service on its board of directors during 2023. LENZ reimburses its directors for expenses associated with attending meetings of its board of directors and its committees.

Mr. Schimmelpennink is LENZ's only director who was an employee director during 2023. See the section titled "*LENZ Executive Compensation*" beginning on page 246 of this proxy statement/prospectus for information about Mr. Schimmelpennink's compensation that he received for serving as LENZ's President and Chief Executive Officer during 2023. Mr. Schimmelpennink did not receive any additional compensation for serving on the LENZ board of directors during 2023.

The following table presents the total compensation that each of our then non-employee directors received during the fiscal year ended December 31, 2023.

Name	Option Awards ($)(1)	Total ($)
Frederic Guerard, Pharm.D.	121,706	$ 121,706
James McCollum	—	—
Clare Ozawa, Ph.D.	—	—
Zach Scheiner, Ph.D.	—	—
Chris Dimitropoulos	—	—
Stefan Larson, Ph.D.	—	—
Shelley Thunen	—	—

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2023, computed in accordance with FASB ASC Topic 718, Compensation—Stock Compensation. The assumptions used in calculating the grant date fair value of the awards disclosed in this column are set forth in Note 10 to LENZ's audited financial statements included elsewhere in this proxy statement/prospectus. These amounts do not reflect the actual economic value that will be realized by the non-employee director upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

The following table lists all outstanding option awards held by non-employee directors as of December 31, 2023. None of LENZ's non-employee directors held any outstanding stock awards as of December 31, 2023.

Name	Number of Shares Underlying Outstanding Options
Frederic Guerard, Pharm.D.	269,383
James McCollum	470,000
Clare Ozawa, Ph.D.	—
Zach Scheiner, Ph.D.	—
Chris Dimitropoulos	—
Stefan Larson, Ph.D.	—
Shelley Thunen	—

MATTERS BEING SUBMITTED TO A VOTE OF GRAPHITE STOCKHOLDERS

PROPOSAL NO. 1—THE NASDAQ STOCK ISSUANCE PROPOSAL

General

At the Graphite special meeting, Graphite stockholders will be asked to approve (i) the issuance of shares of Graphite common stock to the LENZ stockholders pursuant to the Merger Agreement and Nasdaq Listing Rule 5635(a), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding immediately prior to the merger, (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite common stock to the PIPE investors pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite common stock will represent more than 20% of the shares of Graphite common stock outstanding as of the date of the execution of the Subscription Agreement.

Immediately following the merger and the Graphite private placement, assuming a subscription amount of $53.5 million, it is expected that the former LENZ securityholders will own approximately 56.3% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, the existing Graphite securityholders as of immediately prior to the merger will own approximately 30.7% of the outstanding shares of capital stock of the combined company on a fully-diluted basis, and the investors issued shares of Graphite common stock in the Graphite private placement will own approximately 13.0% of the outstanding shares of capital stock of the combined company on a fully-diluted basis (excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP) and subject to certain assumptions, including, but not limited to, Graphite's net cash at closing being between $115 million and $175 million.

The terms of, reasons for and other aspects of the Merger Agreement, the merger and the issuance of Graphite common stock in the merger and the Graphite private placement are described in detail in the other sections in this proxy statement/prospectus. A copy of the Merger Agreement is attached as *Annex A* to this proxy statement/prospectus.

Reason for the Proposal

Under Nasdaq Listing Rule 5635(a), a company listed on Nasdaq is required to obtain stockholder approval prior to the issuance of common stock, among other things, in connection with the acquisition of another company's stock, if (x) pursuant to Nasdaq Listing Rule 5635(a)(1), the number of shares of common stock to be issued is in excess of 20% of the number of shares of common stock then outstanding, or (y) pursuant to Nasdaq Listing Rule 5635(a)(2), any director, officer or "Substantial Shareholder" (as defined by Nasdaq Listing Rule 5635(e)(3)) of such company has a 5% or greater interest, directly or indirectly, in the company to be acquired or in the consideration to be paid in the transaction and the issuance of common stock could result in an increase in outstanding common shares or voting power of 5% or more. The potential issuance of the shares of Graphite common stock in the merger exceeds the 20% under the Nasdaq Listing Rules and is expected to represent approximately 56.3% of Graphite's common stock immediately following the merger, and, taken together with the shares expected to be issued in the Graphite private placement, is expected to represent approximately 69.3% of Graphite's common stock immediately following the merger. In addition, entities affiliated with Versant Ventures beneficially own approximately 28.3% of the outstanding shares of Graphite common stock prior to the merger and approximately 17.0% of the outstanding shares of LENZ capital stock prior to the merger, and representatives of Versant Ventures serve on the board of directors of each of pre-merger Graphite and pre-merger LENZ. Accordingly, in order to ensure compliance with Nasdaq Listing Rule 5635(a), Graphite must obtain the approval of Graphite stockholders for the issuance of these shares of Graphite common stock in the merger and the Graphite private placement.

Under Nasdaq Listing Rule 5635(b), a company listed on Nasdaq is required to obtain stockholder approval prior to an issuance of stock that will result in a "change of control" of the listed company. It is expected that Nasdaq will determine that the merger constitutes a "change of control" of the listed company. Accordingly, in order to ensure compliance with Nasdaq Listing Rule 5635(b), Graphite must obtain the approval of Graphite stockholders of the change of control resulting from the merger.

Under Nasdaq Listing Rule 5635(d), a company listed on Nasdaq is required to obtain stockholder approval prior to the issuance of common stock, among other things, in a transaction other than a public offering at a price less than the "minimum price" which either alone or together with sales by officers, directors or substantial stockholders of the company equals 20% or more of the common stock or 20% or more of the voting power outstanding before the issuance. For Nasdaq purposes, "minimum price" means a price that is the lower of: (i) the Nasdaq Official Closing Price (as reflected on Nasdaq.com) immediately preceding the signing of the binding agreement; or (ii) the average Nasdaq Official Closing Price of the common stock (as reflected on Nasdaq.com) for the five trading days immediately preceding the signing of the binding agreement.

Upon the consummation of the Graphite private placement, Graphite expects to issue, in the aggregate, an estimated 24.9 million shares of Graphite common stock to the PIPE investors. Graphite expects that the Graphite private placement will result in an issuance below the "minimum price" and would result in the issuance by Graphite of 20% or more of its outstanding common stock, which will result in the issuance by Graphite of 20% or more of its outstanding common stock. Accordingly, to ensure compliance with Nasdaq Listing Rule 5635(d), Graphite must obtain the approval of the Graphite stockholders for the proposed Graphite private placement of 20% or more of its outstanding common stock below the "minimum price". For more information regarding the Graphite private placement, see the section titled "*Agreements Related to the Merger—Subscription Agreement*" beginning on page 224 of this proxy statement/prospectus.

Required Vote

The affirmative vote of a majority of the votes properly cast by the holders of Graphite common stock entitled to vote at the Graphite special meeting is required to approve the Nasdaq Stock Issuance Proposal. Abstentions and broker non-votes, if any, will have no effect on the Nasdaq Stock Issuance Proposal.

The merger is conditioned upon the approval of the Nasdaq Stock Issuance Proposal (or the waiver thereof in accordance with the terms of the Merger Agreement). Notwithstanding the approval of the Nasdaq Stock Issuance Proposal, if the merger is not consummated for any reason, the actions contemplated by the Nasdaq Stock Issuance Proposal will not be effected.

Certain of Graphite stockholders have agreed to vote any shares of common stock owned by them in favor of the Nasdaq Stock Issuance Proposal, subject to the terms of the support agreements. See "*Agreements Related to the Merger—Support Agreements*" beginning on page 224 of this proxy statement/prospectus for more information.

Unless otherwise instructed, it is the intention of the persons named in the accompanying proxy card to vote shares represented by properly executed proxy cards "**FOR**" the approval of the Nasdaq Stock Issuance Proposal.

THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE NASDAQ STOCK ISSUANCE PROPOSAL.

PROPOSAL NO. 2—THE CHARTER AMENDMENT PROPOSAL

General

At the Graphite special meeting, Graphite stockholders will be asked to approve an amendment to the Graphite charter to (i) effect a reverse stock split of Graphite's issued common stock at a ratio in the range between 1:6 to 1:12, inclusive and (ii) change Graphite's name from "Graphite Bio, Inc." to "LENZ Therapeutics, Inc.".

The final reverse stock split ratio and effectiveness of such amendment and the abandonment of all other ratios of such amendment will be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time. Upon the effectiveness of such amendment to effect the reverse stock split (the "reverse stock split effective time"), the issued shares of Graphite common stock immediately prior to the reverse stock split effective time will automatically without further action on the part of Graphite be combined into a smaller number of shares such that a Graphite stockholder will own one new share of Graphite common stock for every six to twelve shares of issued Graphite common stock held by such stockholder immediately prior to the reverse stock split effective time. Based upon the reverse stock split ratio as mutually agreed by the Graphite board of directors and LENZ board of directors, proportionate adjustments will be made to the per share exercise price, and/or the number of shares issuable upon the exercise or vesting of all then outstanding Graphite options, which will result in a proportional decrease in the number of shares of Graphite common stock reserved for issuance upon exercise or vesting, of such stock options, and, in the case of stock options, a proportional increase in the exercise price of all such stock options.

The proposed form of certificate of amendment to the Graphite charter, a copy of which is attached as *Annex F* to this proxy statement/prospectus, will effect the reverse stock split but ***will not*** change the number of authorized shares of Graphite common stock or Graphite preferred stock, or the par value of Graphite common stock or Graphite preferred stock. The final ratio and effectiveness of such amendment and the abandonment of all other ratios of such amendment will be mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time. In the event that a final reverse stock split ratio is selected and the reverse stock split is not abandoned, a certificate of amendment reflecting the final reverse stock split ratio will be filed with the Delaware Secretary of State and the amendments reflecting all other reverse stock split ratios will be abandoned

Reasons for the Reverse Stock Split

The Graphite board of directors approved the proposal approving the amendment to the Graphite charter effecting the reverse stock split for the following reasons:

- the Graphite board of directors believes effecting the reverse stock split will result in an increase in the minimum bid price of Graphite's common stock and reduce the risk of a delisting of Graphite common stock from Nasdaq in the future;
- the Graphite board of directors believes a higher stock price may help generate investor interest in Graphite and ultimately the combined company and help Graphite attract and retain employees;
- the Graphite board of directors believes a higher stock price may increase trading volume in Graphite common stock and facilitate future financings by the combined company;
- the Graphite board of directors believes that the resulting increase in the number of authorized and unissued shares available for future issuance will facilitate the issuance of shares to the stockholders of LENZ pursuant to the Merger Agreement, as described in the Nasdaq Stock Issuance Proposal, and ultimately the consummation of the merger; and
- the Graphite board of directors believes that a range of reverse stock split ratios provides it with the most flexibility to achieve the desired results of the reverse stock split.

Requirements for Listing on Nasdaq

Graphite common stock is currently listed on The Nasdaq Global Market under the symbol "GRPH." Graphite has filed an initial listing application pursuant to the terms of the Merger Agreement for the combined company to list the securities of the combined company on Nasdaq.

According to the Nasdaq rules, an issuer must, in a case such as this, apply for initial inclusion following a transaction whereby the issuer combines with a non-Nasdaq entity, resulting in a change of control of the issuer and potentially allowing the non-Nasdaq entity to obtain a Nasdaq listing. Accordingly, the listing standards of Nasdaq will require Graphite to have, among other things, a $4.00 per share minimum bid price for a certain number of trading days preceding the closing of the merger. Therefore, the reverse stock split may be necessary in order to consummate the merger.

In addition, it is a condition to the closing of the merger that the shares of Graphite common stock to be issued in the merger pursuant to the Merger Agreement have been approved for listing on Nasdaq.

One of the effects of the reverse stock split will be to effectively increase the proportion of authorized shares which are unissued relative to those which are issued. This could result in Graphite's management being able to issue more shares without further stockholder approval. The reverse stock split will not affect the number of authorized shares of Graphite capital stock, which will continue to be authorized pursuant to the Graphite charter.

Potential Increased Investor Interest

On February 12, 2024, Graphite common stock closed at $2.97 per share. An investment in Graphite common stock may not appeal to brokerage firms that are reluctant to recommend lower priced securities to their clients. Investors may also be dissuaded from purchasing lower priced stocks because the brokerage commissions, as a percentage of the total transaction, tend to be higher for such stocks. Moreover, the analysts at many brokerage firms do not monitor the trading activity or otherwise provide research coverage of lower priced stocks. Also, the Graphite board of directors believes that most investment funds are reluctant to invest in lower priced stocks.

There are risks associated with the reverse stock split, including that the reverse stock split may not result in an increase in the per share price of Graphite common stock.

Graphite cannot predict whether the reverse stock split will increase the market price for Graphite common stock. The history of similar stock split combinations for companies in like circumstances is varied. There is no assurance that:

- the market price per share of Graphite common stock after the reverse stock split will rise in proportion to the reduction in the number of shares of Graphite common stock outstanding before the reverse stock split;
- the reverse stock split will result in a per share price that will attract brokers and investors who do not trade in lower priced stocks;
- the reverse stock split will result in a per share price that will increase the ability of Graphite to attract and retain employees;
- the market price per share will either exceed or remain in excess of the $1.00 minimum bid price as required by Nasdaq for continued listing; or
- the market price per share will achieve and maintain the $4.00 minimum bid price requirement for a sufficient period of time for the combined company's common stock to be approved for listing by Nasdaq.

The market price of Graphite common stock will also be based on the performance of Graphite, and after the merger, on the performance of the combined company, and other factors, some of which are unrelated to the number of shares outstanding. If the reverse stock split is effected and the market price of Graphite common stock declines, the percentage decline as an absolute number and as a percentage of the overall market capitalization of Graphite may be greater than would occur in the absence of a reverse stock split. Furthermore, the liquidity of Graphite common stock could be adversely affected by the reduced number of shares that would be outstanding after the reverse stock split.

Principal Effects of the Reverse Stock Split

The reverse stock split will be realized simultaneously for all shares of Graphite common stock and Graphite options outstanding immediately prior to the effective time of the reverse stock split. The reverse stock split will affect all holders of shares of Graphite common stock and Graphite options outstanding immediately prior to the effective time of the reverse stock split uniformly. Each and each such stockholder will hold the same percentage of Graphite common stock outstanding immediately following the reverse stock split as that stockholder held immediately prior to the reverse stock split, except for immaterial adjustments that may result from the treatment of fractional shares as described below. The reverse stock split will not change the par value of Graphite common stock or preferred stock and will not reduce the number of authorized shares of Graphite common stock or preferred stock. Graphite common stock issued pursuant to the reverse stock split will remain fully paid and nonassessable. The reverse stock split will not affect Graphite continuing to be subject to the periodic reporting requirements of the Exchange Act.

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates

If the Graphite stockholders approve the amendments to the Graphite charter effecting the reverse stock split, and if the Graphite board of directors still believes that a reverse stock split is in the best interests of Graphite and its stockholders, Graphite will file the certificate of amendment to the Graphite charter with the Secretary of State of the State of Delaware at such time as the Graphite board of directors has determined to be the appropriate reverse stock split effective time at a ratio as mutually agreed by the Graphite board of directors and the LENZ board of directors prior to the effective time. The Graphite board of directors may delay effecting the reverse stock split without resoliciting stockholder approval. Beginning at the reverse stock split effective time, each stock certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

Beneficial Owners of Common Stock. Upon the implementation of the reverse stock split, Graphite intends to treat shares held by stockholders in "street name" (i.e., through a bank, broker, custodian or other nominee), in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers, custodians or other nominees will be instructed to effect the reverse stock split for their beneficial holders holding Graphite common stock in street name. However, these banks, brokers, custodians or other nominees may have different procedures than registered stockholders for processing the reverse stock split and making payment for fractional shares. If a stockholder holds shares of Graphite common stock with a bank, broker, custodian or other nominee and has any questions in this regard, stockholders are encouraged to contact their bank, broker, custodian or other nominee.

Registered Holders of Common Stock in Book-Entry Form. Certain of Graphite's registered holders of common stock hold some or all of their shares electronically in book-entry form with Graphite's transfer agent, Equiniti Trust Company, LLC. These stockholders do not hold physical stock certificates evidencing their ownership of Graphite common stock. However, they are provided with a statement reflecting the number of shares of Graphite common stock registered in their accounts. If a stockholder holds registered shares in book- entry form with Graphite's transfer agent, no action needs to be taken to receive post-reverse stock split shares or payment in lieu of fractional shares, if applicable. If a stockholder is entitled to post-reverse stock split shares, a transaction statement will automatically be sent to the stockholder's address of record indicating the number of shares of Graphite common stock held following the reverse stock split.

Registered Holders of Common Stock in Certificate Form. As soon as practicable after the reverse stock split effective time, the Graphite stockholders will be notified that the reverse stock split has been effected. Graphite expects that the Graphite transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-split shares will be asked to surrender to the exchange agent certificates representing pre-split shares held in certificated form in exchange for certificates representing post- split shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by Graphite. No new certificates will be issued to a stockholder until such stockholder has surrendered such stockholder's outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent. Any pre-split shares submitted for transfer, whether pursuant to a sale or other disposition, or otherwise, will automatically be exchanged for post-split shares. **Stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) unless and until requested to do so**.

Fractional Shares

No fractional shares will be issued in connection with the reverse stock split. Stockholders of record who otherwise would be entitled to receive fractional shares because they hold a number of pre-split shares not evenly divisible by the number of pre-split shares for which each post-split share is to be reclassified, will be entitled, upon surrender to the exchange agent of certificates representing such shares, to a cash payment in lieu thereof at a price equal to the fraction to which the stockholder would otherwise be entitled multiplied by the closing price of the common stock on Nasdaq on the date of the filing of the certificate of amendment to Graphite's charter effecting the reverse stock split. For the foregoing purposes, all shares of common stock held by a holder will be aggregated (thus resulting in no more than one fractional share per holder). The ownership of a fractional interest will not give the holder thereof any voting, dividend or other rights except to receive payment therefor as described herein.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where Graphite is domiciled and where the funds will be deposited, sums due for fractional interests that are not timely claimed after the effective date of the split may be required to be paid to the designated agent for each such jurisdiction, unless correspondence has been received by Graphite or the exchange agent concerning ownership of such funds within the time permitted in such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds will have to seek to obtain them directly from the state to which they were paid.

Potential Anti-Takeover Effect

Although the increased proportion of unissued authorized shares to issued shares could, under certain circumstances, have an anti-takeover effect, for example, by permitting issuances that would dilute the stock ownership of a person seeking to effect a change in the composition of the Graphite board of directors or contemplating a tender offer or other transaction for the combination of Graphite with another company, the reverse stock split is not being proposed in response to any effort of which Graphite is aware to accumulate shares of Graphite common stock or obtain control of Graphite, other than in connection with the merger, nor is it part of a plan by management to recommend a series of similar amendments to the Graphite board of directors and stockholders. Other than the proposals being submitted to the Graphite stockholders for their consideration at the Graphite special meeting, the Graphite board of directors does not currently contemplate recommending the adoption of any other actions that could be construed to affect the ability of third parties to take over or change control of Graphite. For more information, please see the section titled "*Risk Factors—Risks Related to the Combined Company*" beginning on page 112 of this proxy statement/prospectus.

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following discussion is a summary of the material U.S. federal income tax considerations generally applicable to U.S. holders (as defined below) of Graphite common stock in connection with the reverse stock split. This section applies only to persons that hold their Graphite common stock as capital assets for U.S. federal income tax purposes (generally, property held for investment). This discussion is a summary only and does not discuss all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances or status including:

- brokers, dealers or traders in securities, banks, insurance companies, other financial institutions or mutual funds;
- real estate investment trusts; regulated investment companies; tax-exempt organizations or governmental organizations; qualified foreign pension funds (or entities wholly owned by one or more qualified foreign pension funds);
- pass-through entities such as partnerships, S corporations, disregarded entities for U.S. federal income tax purposes and limited liability companies treated as such for U.S. federal income tax purposes (and investors therein);
- persons who hold their shares as part of a straddle, hedge, wash sale, synthetic security, constructive sale, conversion transaction or other integrated transaction;
- U.S. holders that have a functional currency other than the U.S. dollar;
- persons that are not U.S. holders;
- persons that actually or constructively own five percent or more of Graphite voting shares or five percent or more of the total value of all classes of shares of Graphite;
- taxpayers that are subject to the mark-to-market accounting rules;
- persons who hold shares of Graphite common stock that constitute "qualified small business stock" under Section 1202 of the Code or as "Section 1244 stock" for purposes of Section 1244 of the Code;
- persons who acquired their shares of Graphite common stock in a transaction subject to the gain rollover provisions of Section 1045 of the Code;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to Graphite common stock being taken into account in an "applicable financial statement" (as defined in the Code);
- persons who acquired their shares of Graphite common stock pursuant to the exercise of options or otherwise as compensation or through a tax-qualified retirement plan or through the exercise of a warrant or conversion right under convertible instruments; and
- expatriates or former citizens or long-term residents of the United States.

This discussion is based on the Code, proposed, temporary and final Treasury Regulations promulgated under the Code, and judicial and administrative interpretations thereof, all as of the date hereof. All of the foregoing is subject to change, which change could apply retroactively and could affect the tax considerations described herein. This discussion does not address U.S. federal taxes other than those pertaining to U.S. federal income taxation (such as estate or gift taxes, the alternative minimum tax or the Medicare tax on investment income), nor does it address any aspects of U.S. state or local or non-U.S. taxation.

Graphite has not and does not intend to seek any rulings from the IRS regarding the reverse stock split. There can be no assurance that the IRS will not take positions inconsistent with the considerations discussed below or that any such positions would not be sustained by a court.

If any entity or arrangement classified as a partnership for U.S. federal income tax purposes holds Graphite common stock, the tax treatment of such partnership and any person treated as a partner of such partnership will generally depend on the status and activities of the partner and the activities of the partnership. Partnerships holding any Graphite common stock and persons that are treated as partners of such partnerships should consult their tax advisors as to the particular U.S. federal income tax consequences of the reverse stock split to them.

As used herein, a "U.S. holder" is a beneficial owner of Graphite common stock that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity that is treated as a corporation for U.S. federal income tax purposes) that is created or organized (or treated as created or organized) in or under the laws of the United States, any state thereof or the District of Columbia or otherwise treated as a U.S. tax resident for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the administration of such trust and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) it has a valid election in place to be treated as a U.S. person (within the meaning of Section 7701(a)(30) of the Code).

In addition, the following discussion does not address any tax consequences of transactions effectuated before, after or at the same time as the reverse stock split, whether or not they are in connection with the reverse stock split, except as specifically provided below. No ruling from the IRS or opinion of counsel has been or will be requested in connection with the reverse stock split. Graphite stockholders should be aware that the IRS could adopt a position contrary to that set forth in this discussion and which could be sustained by a court.

STOCKHOLDERS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY U.S. STATE OR LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Tax Consequences of the Reverse Stock Split

The proposed reverse stock split is expected to constitute a "recapitalization" for U.S. federal income tax purposes pursuant to Section 368(a)(1)(E) of the Code. As a result, a U.S. holder should not recognize gain or loss upon the proposed reverse stock split, except with respect to cash received in lieu of a fractional share of Graphite common stock, as discussed below. A U.S. holder's aggregate adjusted tax basis in the shares of Graphite common stock received pursuant to the proposed reverse stock split should equal the aggregate adjusted tax basis of the shares of the Graphite common stock surrendered (excluding any portion of such basis that is allocated to any fractional share of Graphite common stock), and such U.S. holder's holding period in the shares of Graphite common stock received should include the holding period in the shares of Graphite common stock surrendered. U.S. Treasury Regulations provide detailed rules for allocating the tax basis and holding period of the shares of Graphite common stock surrendered to the shares of Graphite common stock received in a recapitalization such as the proposed reverse stock split. U.S. holders of shares of Graphite common stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

Cash in Lieu of Fractional Shares

A U.S. holder that receives cash in lieu of a fractional share of Graphite common stock pursuant to the proposed reverse stock split should recognize capital gain or loss in an amount equal to the difference between

the amount of cash received and the U.S. holder's tax basis in the shares of Graphite common stock surrendered that is allocated to such fractional share of Graphite common stock. Such capital gain or loss should be long-term capital gain or loss if the U.S. holder's holding period for Graphite common stock surrendered exceeded one year at the effective time of the reverse stock split.

Possible Alternative Tax Treatment

As discussed above under the section titled "*The Merger—Material U.S. Federal Income Tax Considerations—Material U.S. Federal Income Tax Consequences of the Special Cash Dividend to Holders of Graphite Common Stock*" beginning on page 194 of this proxy statement/prospectus, although the matter is not free from doubt, Graphite will treat the payment of the special cash dividend and the proposed reverse stock split as separate transactions for U.S. federal income tax purposes, and the above discussion assumes that this treatment will be respected. It is possible that the reverse stock split and the special cash dividend could be treated as a single transaction, in which case the U.S. federal income tax consequences of the reverse stock split to a U.S. Holder may differ from those discussed above. U.S. Holders should consult their tax advisors regarding the tax consequences of the reverse stock split.

Tax Reporting Regarding the Reverse Stock Split

Holders who owned at least five percent (by vote or value) of the total outstanding stock of Graphite or who owned securities in Graphite with a basis of $1,000,000 or more are required to attach a statement to their tax returns for the year in which the reverse stock split is consummated that contains the information listed in Treasury Regulations Section 1.368-3(b). Such statement must include the holder's tax basis in the holder's Graphite common stock and the fair market value of such stock.

Information Reporting and Backup Withholding

Payments of cash made in lieu of a fractional share of Graphite common stock may, under certain circumstances, be subject to information reporting and backup withholding. To avoid backup withholding, each holder of Graphite common stock that does not otherwise establish an exemption should furnish its taxpayer identification number and comply with the applicable certification procedures.

Backup withholding is not an additional tax. Any amounts withheld will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle such holder to a refund, provided the required information is timely furnished to the IRS. Holders of Graphite common stock should consult their tax advisors regarding their qualification for an exemption from backup withholding and the procedures for obtaining such an exemption.

Reasons for the Name Change

The Graphite board of directors approved the proposal approving the name change because it believes this will allow for brand recognition of LENZ's products and programs following the consummation of the merger. Graphite's management believes that the current name will no longer accurately reflect the business of Graphite and the mission of the combined company subsequent to the consummation of the merger.

Required Vote

The affirmative vote of the holders of a majority of the votes properly cast by the holders of Graphite common stock for the Charter Amendment Proposal is required to approve the Charter Amendment Proposal. Abstentions and broker non-votes, if any, will have no effect on the Charter Amendment Proposal.

The merger is conditioned upon the approval of the Charter Amendment Proposal (or the waiver thereof in accordance with the terms of the Merger Agreement). The approval of the Charter Amendment Proposal is also

conditioned upon the approval of the Nasdaq Stock Issuance Proposal. Therefore, if approval of the merger is not obtained, the Charter Amendment Proposal will have no effect, even if approved by Graphite stockholders.

Certain of Graphite and LENZ's stockholders have agreed to vote any shares of common stock owned by them in favor of the Charter Amendment Proposal. See "*Agreements Related to the Merger—Support Agreements*" beginning on page 224 of this proxy statement/prospectus for more information.

Unless otherwise instructed, it is the intention of the persons named in the accompanying proxy card to vote shares represented by properly executed proxy cards "**FOR**" the approval of the Charter Amendment Proposal.

THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE CHARTER AMENDMENT PROPOSAL.

PROPOSAL NO. 3—THE 2024 PLAN PROPOSAL

Overview

Graphite stockholders are also being asked to consider and vote upon the 2024 Plan Proposal to approve the combined company's 2024 Equity Incentive Plan, which is referred to herein as the "2024 Plan." The Graphite board of directors approved the 2024 Plan on January 15, 2024, subject to stockholder approval at the Graphite special meeting. If stockholders approve the 2024 Plan Proposal, the 2024 Plan will become effective on the consummation of the merger. If the 2024 Plan is not approved by the stockholders, it will not become effective and no awards will be granted thereunder. The 2024 Plan is described in more detail below.

General Information

On January 15, 2024, the Graphite board adopted and approved the 2024 Plan and is submitting the 2024 Plan to stockholders for their adoption and approval. Pursuant to the Merger Agreement, Graphite and LENZ have each agreed that they will use commercially reasonable efforts to cause Graphite's stockholders to approve the 2024 Plan. The Graphite board of directors believes the 2024 Plan advances the combined company's interests by allowing the combined company to attract and retain the best available personnel for positions of substantial responsibility; to provide additional incentive to employees, directors, and consultants; and to promote the success of the combined company's business. The Graphite board of directors has adopted and approved the 2024 Plan to permit the combined company to continue to use stock-based compensation to align stockholder and participant interests and to motivate participants providing services to the combined company. Graphite's stock-based compensation program is currently operated under Graphite's 2021 Stock Option and Incentive Plan (referred to as the "2021 Plan"). Upon approval of the 2024 Plan by stockholders at the Graphite special meeting, no new awards will be granted under the 2021 Plan after the date of the Graphite special meeting.

The 2024 Plan Will Allow the Combined Company to Effectively Recruit and Retain Key Talent

The Graphite board of directors recommends that the Graphite stockholders approve the 2024 Plan because it believes the combined company's ability to grant equity-based awards is crucial in allowing the combined company to effectively compete for and appropriately motivate and reward key talent. It is in the long-term interest of both the combined company and its stockholders to strengthen the combined company's ability to attract, retain and motivate employees, officers, nonemployee directors and certain other service providers and to provide additional incentive for those persons through stock ownership and other incentives to improve financial performance, increase profits and strengthen the mutuality of interest between those persons and the combined company's stockholders.

The 2024 Plan sets reasonable annual limits on the awards that non-employee directors may receive and updates the combined company's stock-based compensation program to reflect the current best practices in corporate governance, as further described below. In addition, the 2024 Plan provides for annual automatic share increases that will permit the combined company to continue to meet its equity-based award needs in the future without seeking stockholder approval of share reserve increases.

The Share Reserve and Annual Increase Will Meet the Combined Company Equity Needs

The number of shares of common stock that Graphite is asking stockholders approve be initially reserved for issuance under the 2024 Plan is equal to 21,083,640 shares, plus any shares subject to awards granted under LENZ's 2020 Equity Incentive Plan (including, but not limited to, awards granted under LENZ's 2020 Equity Incentive Plan that were assumed in the merger), Graphite's 2021 Plan and Graphite's 2020 Plan, each as amended from time to time (referred to collectively as the "Prior Plans"), that, on or after the effective date of the merger, expire or terminate without having been exercised in full, are tendered to or withheld for payment of an exercise price or for tax withholding obligations, are forfeited or repurchased due to failure to vest, with a maximum number of shares that may be added to the 2024 Plan equal to 11,255,510 shares. Additionally, the

2024 Plan provides for an annual increase in the number of shares reserved for insurance under the 2024 Plan beginning on the first day of each fiscal year beginning with the 2025 fiscal year, in an amount equal to the least of (i) 31,625,460 shares of common stock, (ii) 5% of the number of shares of all classes of common stock outstanding as of the last day of the immediately preceding fiscal year and (iii) a lesser number of shares of common stock determined by the administrator of the 2024 Plan. The automatic share reserve increase will operate only until the tenth anniversary of the earlier of the combined company's board or stockholder approval of the 2024 Plan.

In setting the initial share reserve and annual increase, the Graphite board of directors and its compensation committee, with the consultation of LENZ and LENZ's compensation consultant, considered a number of factors, including Graphite's forecasted hiring needs following the merger. The Graphite board of directors and its compensation committee believe that the number of shares initially reserved for issuance under the 2024 Plan is sufficient to meet the combined company's fiscal year 2024 hiring needs. However, the Graphite board of directors and its compensation committee believe that the number of shares initially reserved for issuance under the 2024 Plan will be insufficient to accommodate the growing needs of the combined company's business and to promote the growth of the combined company's business in the future. The Graphite board of directors and its compensation committee believe that the 2024 Plan's annual share reserve increase will provide sufficient shares to meet the combined company's future hiring needs.

Promotion of Good Corporate Governance Practices

The Graphite board of directors and its compensation committee believe the use of stock-based incentive awards promotes best practices in corporate governance by maximizing stockholder value. By providing participants in the 2024 Plan with a stake in the combined company's success, the interests of the participants are aligned with those of the combined company's stockholders. Specific features of the 2024 Plan that are consistent with good corporate governance practices include, but are not limited to:

- *Administration*. The Graphite board of directors has delegated primary administration authority to the combined company's compensation committee, which will consist entirely of independent non-employee directors.
- *Annual Limits on Compensation to Non-Employee Directors*. The 2024 Plan sets reasonable annual limits as to the cash compensation and awards that non-employee directors may receive during each fiscal year.
- *Limited transferability*. Awards under the 2024 Plan generally may not be sold, assigned, transferred, pledged, or otherwise alienated, unless otherwise approved by the administrator.
- *Forfeiture Events*. Each award under the 2024 Plan will be subject to any clawback policy that, in the future, the combined company is required by applicable stock exchange rules or applicable laws to adopt (including any such clawback policy that is adopted after the grant of the award), and the administrator may require a participant to forfeit, return, or reimburse the combined company for all or a portion of the award and any amounts paid under the award in order to comply with the clawback policy or applicable laws.

Graphite's executive officers and directors have an interest in the approval of the 2024 Plan because they are eligible to receive equity awards under the 2024 Plan.

Summary of the 2024 Plan

The following paragraphs summarize the key features of the 2024 Plan and its operation. However, this summary is not a complete description of all of the provisions of the 2024 Plan and is qualified in its entirety by the specific language of the 2024 Plan. A copy of the 2024 Plan is provided as *Annex G* to this proxy statement.

Purposes of the 2024 Plan. The purposes of the 2024 Plan are to attract and retain personnel for positions with the combined company; to provide additional incentive to employees, directors, and consultants; and to

promote the success of the combined company's business. These incentives are provided through the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, or performance awards.

Eligibility. The 2024 Plan will provide for the grant of incentive stock options, within the meaning of Section 422 of the Code, to employees of the combined company and any member of the company group, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance awards to the combined company's employees, directors and consultants and any member of the company group. As of February 1, 2024, Graphite had approximately six employees, nine non-employee directors and four consultants. Following the closing of the merger, approximately 30 employees, six non-employee directors and one non-employee consultants of the combined company are expected to be eligible to participate in the 2024 Plan.

Authorized Shares. If Graphite's stockholders approve the 2024 Plan, and subject to adjustment upon certain changes in Graphite's capitalization as described in the 2024 Plan, the maximum number of shares of common stock that will be available for issuance under the 2024 Plan will be 21,083,640 shares of common stock, plus (i) any shares subject to awards granted under the Prior Plans (including, but not limited to, awards granted under LENZ's 2020 Equity Incentive Plan that were assumed in the merger) that, on or after the effective date of the merger, expire or terminate without having been exercised in full, are tendered to or withheld for payment of an exercise price or for tax withholding obligations, are forfeited or repurchased due to failure to vest, with a maximum number of shares that may be added to the 2024 Plan equal to 11,255,510 shares, plus (ii) any shares that become available for issuance due to the automatic share reserve increase or share reserve return (as described below) will be reserved for issuance under the 2024 Plan.

The number of shares available for issuance under the 2024 Plan will include an annual increase on the first day of each fiscal year beginning with the 2024 fiscal year, equal to the least of:

- 31,625,460 shares.
- 5% of the outstanding shares of common stock as of the last day of the immediately preceding fiscal year; or
- a number of lesser shares as determined by the 2024 Plan's administrator.

The automatic share reserve increase will operate only until the tenth anniversary of the earlier of the combined company's board or stockholder approval of the 2024 Plan.

As of February 12, 2024, the per share closing price of Graphite common stock was $2.97. Based upon a price per share of $2.97, the maximum aggregate market value that could potentially be issued under the 2024 Plan at the effective time is $62,618,410.80.

If an award of options or stock appreciation rights expire or become unexercisable without having been exercised in full, is surrendered pursuant to an exchange program, or, with respect to restricted stock, restricted stock units, or stock-settled performance awards, are reacquired by the combined company due to failure to vest or forfeited to the combined company, the unpurchased or unissued shares will become available for future issuance under the 2024 Plan (unless the 2024 Plan has terminated). With respect to stock appreciation rights, only the net shares actually issued will cease to be available under the 2024 Plan and all remaining shares of common stock subject to the stock appreciation right will remain available for future issuance under the 2024 Plan (unless the 2024 Plan has terminated). Shares that have actually been issued under the 2024 Plan will not be returned to the 2024 Plan. Shares used to pay the exercise price of an award or satisfy the tax withholding obligations related to an award will become available for future issuance under the 2024 Plan. To the extent an award is paid out in cash rather than shares, such cash payment will not result in a reduction in the number of shares available for issuance under the 2024 Plan.

Plan Administration. The combined company's board of directors or a committee appointed by the board of directors will administer the 2024 Plan. The combined company's board of directors or the committee appointed

by them may delegate to one or more subcommittees or officers of the combined company, the authority to grant awards to employees of the combined company, if this delegation complies with applicable laws this delegation can be revoked by the combined company's board of directors or the committee they appointed. Different administrators may administer the 2024 Plan with respect to different groups of employees, directors, and consultants. The combined company's board of directors may retain the authority to administer the 2024 Plan along with a committee and may revoke delegation of some or all of the authority delegated to that committee. The combined company's compensation committee will initially administer the 2024 Plan. Subject to the provisions of the 2024 Plan, the administrator has the power to administer the 2024 Plan and make all determinations deemed necessary or advisable for administering the 2024 Plan, including but not limited to, the power to determine the fair market value of the combined company's common stock, select the service providers to whom awards may be granted, determine the number of shares covered by each award, approve forms of award agreements for use under the 2024 Plan, determine the terms and conditions of awards (including, but not limited to, the exercise price, the time or times at which awards may be exercised, any vesting acceleration or waiver or forfeiture restrictions and any restriction or limitation regarding any award or the shares relating thereto), construe and interpret the terms of the 2024 Plan and awards granted under it, establish, amend and rescind rules relating to the 2024 Plan, including adopting sub-plans, interpret, modify or amend each award, including but not limited to the discretionary authority to extend the post-termination exercisability period of awards, and allow a participant to defer the receipt of payment of cash or the delivery of shares that would otherwise be due to such participant under an award. The administrator also has the authority to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered or cancelled in exchange for awards of the same type, which may have a higher or lower exercise price and/or different terms, awards of a different type, and/or cash or by which the exercise price of an outstanding award is increased or reduced. The administrator's decisions, determinations, and interpretations are final and binding on all participants.

Stock Options. Stock options may be granted under the 2024 Plan. The exercise price of options granted under the 2024 Plan must generally be at least equal to the fair market value of the combined company's common stock on the date of grant. The term of an option may not exceed ten years. With respect to any participant who owns more than 10% of the voting power of all classes of the combined company's (or any parent or subsidiary of the combined company's) outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director, or consultant (except for termination as a result of death or disability), he or she may exercise his or her option for a period of thirty days or such longer period of time stated in his or her option agreement. If termination is due to death or disability, the option will remain exercisable for six months following the termination of service or such longer period of time as specified in the participant's award agreement. Subject to the provisions of the 2024 Plan, the administrator determines the other terms of options.

Stock Appreciation Rights. Stock appreciation rights may be granted under the 2024 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of the combined company's common stock between the exercise date and the date of grant. The administrator of the 2024 Plan will determine the number of shares of common stock subject to a stock appreciation right, its exercise price a, the expiration date of a stock appreciation right, and other terms and conditions, which will be set forth in an award agreement. The per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Restricted stock may be granted under the 2024 Plan. Restricted stock awards are grants of shares of the combined company's common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares subject an award of restricted stock

and will determine the terms and conditions of such awards. Unless determined otherwise by the administer, shares of restricted stock will be held in escrow while unvested. Recipients of restricted stock awards generally may exercise full voting rights with respect to such shares while unvested, unless the administrator provides otherwise. An award recipient of restricted stock will not be entitled to receive dividends or other distributions paid with respect to the shares underlying the restricted stock award while those shares are unvested, unless the administrator provides otherwise. If the administrator provides that dividends and distributions will be received and any such dividends or distributions are paid in cash they will be subject to the same provisions regarding forfeitability as the shares of common stock underlining the restricted stock award with respect to which they were paid and if dividends or distributions are paid in shares, the shares will be subject to the same restrictions on transferability and forfeitability as the shares with respect to which they were paid and, unless the administrator determines otherwise, the Company will hold such dividends until the restrictions on the shares with respect to which they were paid have lapsed. The administrator may impose (prior to grant) or remove (at any time) any restrictions on shares covered by an award of restricted stock.

Restricted Stock Units. Restricted stock units may be granted under the 2024 Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of the combined company's common stock. Subject to the provisions of the 2024 Plan, the administrator determines the terms and conditions of restricted stock units, including the vesting criteria (if any), the number of restricted stock units paid out and the form and timing of payment, which will be set out in the applicable award agreement. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its sole discretion. The administrator may settle earned restricted stock units in the form of cash, in shares or in some combination thereof. In addition, the administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

Performance Awards. Performance awards may be granted under the 2024 Plan. Performance awards are awards that will result in a payment to a participant only if performance objectives established by the administrator are achieved or the awards otherwise vest. The administrator will specify any time period during which any performance objectives or other vesting provisions, if any, will be measured, and such other terms, as specified in the applicable award agreement. The administrator may set performance objectives based on the achievement of company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its discretion. After the grant of a performance award, the administrator, may reduce or waive any performance objectives or other vesting provisions for such performance awards. Performance awards will have an initial value established by the administrator on or prior to the grant date. The administrator, in its sole discretion, may pay out earned performance awards in cash, shares, or in some combination thereof.

Outside Directors. All outside (non-employee) directors will be eligible to receive all types of awards (except for incentive stock options) under the 2024 Plan. To provide a maximum limit on the cash retainer fees and equity awards that can be made to outside directors, the 2024 Plan provides that in any given fiscal year, an outside director will not be granted cash retainer fees and equity awards with an aggregate value greater than $750,000 (increased to $1,000,000 in the fiscal year in connection with his or her initial service as an outside director), with the value of each equity award based on its grant date fair value as determined according to GAAP for purposes of this limit. Any cash compensation paid, or awards granted to an individual for his or her services as an employee or consultant (other than as an outside director) will not count toward this limit.

Non-Transferability of Awards. Unless the administrator provides otherwise, or otherwise required by applicable laws, an award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the participant, only by the participant. If the administrator makes an award transferable, the award will be limited by any additional terms and conditions imposed by the administrator. Any unauthorized transfer of an award will be void.

Certain Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares or other securities of the combined company, other change in the corporate structure of the combined company affecting the shares of common stock, or any similar equity restructuring transaction, as that term is used in Statement of FASB ASC 718 (or any of its successors) affecting the shares of common stock occurs, to prevent diminution or enlargement of the benefits or potential benefits available under the 2024 Plan, the administrator will adjust the number and class of shares that may be delivered under the 2024 Plan and/or the number, class and price of shares covered by each outstanding award and the numerical share limits set forth in the 2024 Plan.

Dissolution or Liquidation. In the event of the combined company's proposed liquidation or dissolution, the administrator will notify participants prior to the effective date of the proposed transaction and, to the extent not previously exercised, all awards will terminate immediately prior to the consummation of such proposed action.

Merger or Change in Control. The 2024 Plan provides that in the event of a merger or change in control, as defined under the 2024 Plan, each outstanding award will be treated as the administrator determines, without a participant's consent, including providing that awards be continued by the successor corporation or a parent or subsidiary of the successor corporation (or an affiliate thereof) or that the vesting of any such awards may accelerate automatically upon consummation of a transaction. The administrator is not required to treat all awards, all awards held by a participant or all awards of the same type similarly. The administrator may take different actions with respect to the vested and unvested portions of an award. The administrator has the authority to modify awards in connection with a change in control or merger in a manner that causes the awards to lose their tax-preferred status, to terminate any right a participant has to exercise an option prior to vesting in the shares of common stock subject to the option, so that following the closing of the transaction the option may only be exercised to the extent it is vested; to reduce the exercise price subject to the award in a manner that is disproportionate to the increase in the number of shares of common stock subject to the award, as long as the amount that would be received upon exercise of the award immediately before and immediately following the closing of the transaction is equivalent and the adjustment complies with applicable laws; and to suspend a participant's right to exercise an option during a limited period of time preceding and or following the closing of the transaction without participant's consent if such suspension is administratively necessary or advisable to permit the closing of the transaction.

If a successor corporation does not continue an award, or some portion of such award, then the participant will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and restricted stock units will lapse, and for awards with performance-based vesting, unless specifically provided for otherwise under the applicable award agreement or other agreement or policy applicable to the participant, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met. If an option or stock appreciation right is not assumed or substituted in the event of a change in control, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period. For awards granted to an outside director, in the event of a change in control, the outside director will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and restricted stock units will lapse and, for awards with performance-based vesting, unless specifically provided for otherwise under the applicable award agreement or other agreement or policy applicable to the participant, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met.

Clawback. All awards under the 2024 Plan will be subject to recoupment under any clawback policy that the combined company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the combined company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. The administrator may impose other

clawback, recovery or recoupment provisions in an award agreement as the administrator determines necessary or appropriate, including without limitation to any reacquisition right regarding previously acquired shares of the combined company's common stock or other cash or property. The administrator may specify in an award agreement that a participant's rights, payments, and benefits with respect to an award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an award.

Effective Date; Amendment; Termination. The effective date of the plan will be the date of the consummation of the merger by and between Graphite, LENZ, and certain other parties, pursuant to the Merger Agreement. The administrator, in its sole discretion, has the authority to amend, alter, suspend or terminate the 2024 Plan, or any part thereof, at any time and for any reason, provided that a participant's rights will not be materially impaired without signed, written agreement authorized by the administrator between the participant and the combined company. The combined company will obtain stockholder approval of any plan amendment to the extent necessary or desirable to comply with applicable laws. Termination of the 2024 Plan will not affect the administrator's ability to exercise the powers granted to it regarding awards granted under the 2024 Plan prior to such termination. The 2024 Plan will continue in effect until terminated pursuant its terms, but (i) no incentive stock options may be granted after 10 years from the earlier of the Graphite board or stockholder approval of the 2024 Plan and (ii) the automatic share reserve increase will operate only until the tenth anniversary of the earlier of the Graphite board or stockholder approval of the 2024 Plan.

Summary of U.S. Federal Income Tax Consequences

The following summary is intended only as a general guide to the U.S. federal income tax consequences of participation in the 2024 Plan. The summary is based on existing U.S. laws and regulations as of the record date, and there can be no assurance that those laws and regulations will not change in the future. The summary does not purport to be complete and does not discuss the tax consequences upon a participant's death, or the provisions of the income tax laws of any municipality, state or foreign country in which the participant may reside. As a result, tax consequences for any particular participant may vary based on individual circumstances.

Incentive Stock Options. A participant recognizes no taxable income for federal income tax purposes as a result of the grant or exercise of an option that qualifies as incentive stock option under Section 422 of the Code. If a participant exercises the option and then later sells or otherwise disposes of the shares acquired through the exercise the option after both the two-year anniversary of the date the option was granted and the one-year anniversary of the exercise, the participant will recognize a capital gain or loss equal to the difference between the sale price of the shares and the exercise price, and the combined company will not be entitled to any deduction for federal income tax purposes.

However, if the participant disposes of such shares either on or before the two-year anniversary of the date of grant or on or before the one-year anniversary of the date of exercise (referred to as a "disqualifying disposition"), any gain up to the excess of the fair market value of the shares on the date of exercise over the exercise price generally will be taxed as ordinary income, unless the shares are disposed of in a transaction in which the participant would not recognize a loss (such as a gift). Any gain in excess of that amount will be a capital gain. If a loss is recognized, there will be no ordinary income, and such loss will be a capital loss. Any ordinary income recognized by the participant upon the disqualifying disposition of the shares generally should be deductible by the combined company for federal income tax purposes, except to the extent such deduction is limited by applicable provisions of the Code.

For purposes of the alternative minimum tax, the difference between the option exercise price and the fair market value of the shares on the exercise date is treated as an adjustment item in computing the participant's alternative minimum taxable income in the year of exercise. In addition, special alternative minimum tax rules may apply to certain subsequent disqualifying dispositions of the shares or provide certain basis adjustments or tax credits for alternative minimum tax purposes.

Nonstatutory Stock Options. A participant generally recognizes no taxable income as the result of the grant of such an option. However, upon exercising the option, the participant normally recognizes ordinary income equal to the amount that the fair market value of the shares on such date exceeds the exercise price. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of the shares acquired by the exercise of a nonstatutory stock option, any gain or loss (based on the difference between the sale price and the fair market value on the exercise date) will be taxed as capital gain or loss. No tax deduction is available to the combined company with respect to the grant of a nonstatutory stock option or the sale of the shares acquired through the exercise of the nonstatutory stock option.

Stock Appreciation Rights. In general, no taxable income is reportable when a stock appreciation right is granted to a participant. Upon exercise, the participant generally will recognize ordinary income in an amount equal to the fair market value of any shares received. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Any additional gain or loss recognized upon any later disposition of the shares would be capital gain or loss.

Restricted Stock Awards. A participant acquiring shares of restricted stock generally will recognize ordinary income equal to the fair market value of the shares on the vesting date. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. The participant may elect pursuant to Section 83(b) of the Code to accelerate the ordinary income tax event to the date of acquisition by filing an election with the IRS no later than thirty days after the date the shares are acquired. Upon the sale of shares acquired pursuant to a restricted stock award, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Restricted Stock Unit Awards. There are no immediate tax consequences of receiving an award of restricted stock units. A participant who is awarded restricted stock units generally will be required to recognize ordinary income in an amount equal to the fair market value of the shares issued to and/or the cash received by such participant at the end of the applicable vesting period or, if later, the settlement date elected by the administrator or a participant. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Any additional gain or loss recognized upon any later disposition of any shares received would be capital gain or loss.

Performance Awards. A participant generally will recognize no income upon the grant of a performance share or a performance award. Upon the settlement of such awards, participants normally will recognize ordinary income in the year of receipt in an amount equal to the cash received and the fair market value of any unrestricted shares received. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of any shares received, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Section 409A of the Code. Section 409A of the Code (referred to as "Section 409A") provides certain requirements for non-qualified deferred compensation arrangements with respect to an individual's deferral and distribution elections and permissible distribution events. Awards granted under the 2024 Plan with a deferral feature will be subject to the requirements of Section 409A. If an award is subject to and fails to satisfy the requirements of Section 409A, the recipient of that award may recognize ordinary income on the amounts deferred under the award, to the extent vested, which may be prior to when the compensation is actually or constructively received. Also, if an award that is subject to Section 409A fails to comply with Section 409A's provisions, Section 409A imposes an additional 20% federal income tax on compensation recognized as ordinary income, as well as interest on such deferred compensation.

Medicare Surtax. In addition, a participant's annual "net investment income", as defined in Section 1411 of the Code, may be subject to a 3.8% federal surtax. Net investment income may include capital gain and/or loss

arising from the disposition of shares issued pursuant to awards granted under the 2024 Plan. Whether a participant's net investment income will be subject to this surtax will depend on the participant's level of annual income and other factors.

Company Deduction and Section 162(m). The combined company generally will be entitled to a tax deduction in connection with an award under the 2024 Plan in an amount equal to the ordinary income realized by a participant and at the time the participant recognizes such income (for example, the exercise of a nonstatutory stock option) except to the extent such deduction is limited by applicable provisions of the Code. Special rules limit the deductibility of compensation paid to the combined company's chief executive officer and other "covered employees" as determined under Section 162(m) and applicable guidance. Under Section 162(m), the annual compensation paid to any of these individuals will be deductible only to the extent that it does not exceed $1,000,000.

THE DESCRIPTION ABOVE IS ONLY A SUMMARY OF THE EFFECT OF U.S. FEDERAL INCOME TAXATION ON PARTICIPANTS AND THE COMBINED COMPANY WITH RESPECT TO AWARDS UNDER THE 2024 PLAN. IT IS NOT COMPLETE AND DOES NOT DISCUSS THE IMPACT OF EMPLOYMENT OR OTHER TAX REQUIREMENTS, THE TAX CONSEQUENCES OF A PARTICIPANT'S DEATH, OR THE PROVISIONS OF THE INCOME TAX LAWS OF ANY MUNICIPALITY, STATE, OR FOREIGN COUNTRY IN WHICH THE PARTICIPANT MAY RESIDE.

New Plan Benefits

The number of awards that an employee, director, or consultant may receive under the 2024 Plan is in the discretion of the administrator and therefore cannot be determined in advance. Consequently, no new plan benefits table is included in this proxy statement/prospectus.

Equity Compensation Plan Information

The following table provides information as of December 31, 2023 with respect to the shares of Graphite common stock that may be issued under Graphite' existing equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights[1]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities in first column)
Equity compensation plans approved by security holders[2]	5,266,998[3]	$ 6.61	10,908,192[4]
Equity compensation plans not approved by security holders	—	$ —	—
Total	5,266,998	$ 6.61	10,908,192

(1) The weighted average exercise price is calculated based Graphite on outstanding stock options.
(2) Includes the following plans: the 2021 Plan, the 2020 Plan, and Graphite's 2021 Employee Stock Purchase Plan (the "2021 ESPP").
(3) No employees are enrolled in the current purchase period and, as such, no shares were purchasable by any employee in the 2021 ESPP on the purchase date for the current purchase period.
(4) As of December 31, 2023, a total of 10,908,192 shares of Graphite common stock have been reserved for issuance pursuant to the 2021 Plan, which number excludes the 2,900,419 shares that were added to the plan as a result of the automatic annual increase on January 1, 2024. The number of shares of Graphite common stock reserved and available for issuance under the 2021 Plan is subject to an automatic annual increase on

each January 1, beginning January 1, 2022, by an amount equal to the lesser of: (i) 5% of the number of shares of Graphite common stock issued and outstanding on the immediately preceding December 31, and (ii) such lesser number of shares of Graphite common stock as determined by the Graphite board of directors or its compensation committee. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in Graphite's capitalization. The shares of Graphite common stock underlying any awards that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by Graphite prior to vesting, satisfied without the issuance of stock, expire or are otherwise terminated, other than by exercise, under the 2021 Plan and the 2020 Plan will be added back to the shares of Graphite common stock available for issuance under the 2021 Plan. Graphite no longer makes grants under the 2020 Plan. As of December 31, 2023, a total of 1,253,729 shares of Graphite common stock have been reserved for issuance pursuant to the 2021 ESPP, which number excludes the 564,000 shares that were added to the plan as a result of the automatic annual increase on January 1, 2024. The number of shares of Graphite common stock reserved and available for issuance under the 2021 ESPP is subject to an automatic annual increase on each January 1, beginning January 1, 2022, by an amount equal to the least of: (i) 564,000 shares of common stock, (ii) 1% of the number of shares of Graphite common stock issued and outstanding on the immediately preceding December 31, and (iii) such lesser number of shares of Graphite common stock as determined by the Graphite board of directors or its compensation committee. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in Graphite's capitalization.

Vote Required

The affirmative vote of the holders of a majority of the votes properly cast by the holders of Graphite common stock for the 2024 Plan Proposal is required to approve the 2024 Plan Proposal. Abstentions and broker non-votes, if any, will have no effect on the 2024 Plan Proposal.

The 2024 Plan Proposal is conditioned on the approval of the Nasdaq Stock Issuance Proposal. Therefore, if approval of the merger is not obtained, the 2024 Plan Proposal will have no effect, even if approved by Graphite stockholders.

THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE PLAN PROPOSAL.

When you consider the recommendation of the Graphite board of directors in favor of approval of the 2024 Plan, you should keep in mind that certain of Graphite's directors and officers have interests in the 2024 Plan that are different from in addition to, or in conflict with your interests as a stockholder, including, among other things, the existence of financial and personal interests, which may result in a conflict of interest on the part of such director(s) between what he, she or they may believe is in the best interests of Graphite and its stockholders and what he, she or they may believe is best for himself, herself or themselves in determining to recommend that stockholders vote for the proposals. In addition, Graphite' officers have interests in the merger that may conflict with your interests as a stockholder. See the section titled "*The Merger—Interests of Graphite's Directors and Executive Officers in the Merger*" beginning on page 174 of this proxy statement/prospectus for a further discussion of these considerations.

PROPOSAL NO. 4—THE 2024 ESPP PROPOSAL

Overview

The Graphite stockholders are also being asked to consider and vote upon the 2024 ESPP Proposal to approve the combined company's 2024 Employee Stock Purchase Plan, which is referred to herein as the "2024 ESPP". The Graphite board of directors approved the 2024 ESPP on January 15, 2024, subject to stockholder approval at the Graphite special meeting. If the Graphite stockholders approve the 2024 ESPP Proposal, the 2024 ESPP will become effective on the consummation of the merger. If the 2024 ESPP is not approved by the Graphite stockholders, it will not become effective. The 2024 ESPP is described in more detail below.

General Information

On January 15, 2024, the Graphite board of directors adopted and approved the combined company's 2024 ESPP and is submitting it to stockholders for their adoption and approval. Pursuant to the Merger Agreement, Graphite and LENZ have each agreed that they will use commercially reasonable efforts to cause the Graphite stockholders to approve the 2024 ESPP. The Graphite board of directors has adopted and approved the 2024 ESPP to provide the combined company's eligible employees an opportunity to purchase the combined company's common stock at a discount through accumulated contributions of their earned compensation. Graphite currently operates its 2021 Employee Stock Purchase Plan (referred to as the "2021 ESPP"). Upon approval of the 2024 ESPP by stockholders, the 2021 ESPP will be terminated. While the 2024 ESPP will become effective the later of its approval by stockholders and the consummation of the merger, the first offering period will commence at a later date determined by the administrator of the 2024 ESPP.

The 2024 ESPP Will Allow the Combined Company to Effectively Recruit and Retain Key Talent

The Graphite board of directors recommends that the Graphite stockholders approve the 2024 ESPP because it believes that it is important to the combined company's ability to compete for talent. The 2024 ESPP may become a significant part of the combined company's overall equity compensation strategy (especially with respect to the combined company's nonexecutive employees). If the Graphite stockholders do not approve the 2024 ESPP, the combined company may not be able to offer competitive compensation to existing employees and qualified candidates, which could prevent it from successfully attracting and retaining highly skilled employees. The Graphite board of directors believes that the 2024 ESPP will be an important factor in attracting, motivating, and retaining qualified personnel who are essential to the combined company's success. The 2024 ESPP provides a significant incentive by allowing employees to purchase shares of the combined company's common stock at a discount.

Following the 2024 ESPP's effectiveness, offering periods will not commence under the 2024 ESPP until determined by the combined company's board of directors or its compensation committee.

The Share Reserve and Annual Increase Will Meet the Combined Company Equity Needs

The Graphite board of directors is asking the Graphite stockholders to approve an initial share reserve of 1,756,970 shares for the 2024 ESPP. Additionally, the 2024 ESPP provides for an annual increase in the number of shares reserved for insurance under the 2024 ESPP on the first day of each fiscal year beginning for the fiscal year following the fiscal year in which the first enrollment date under the 2024 ESPP (if any) occurs, in an amount equal to the least of (i) 2,635,455 shares of the combined company's common stock, (ii) 1% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the administrator.

Summary of the 2024 ESPP

The following is a summary of the principal features of the 2024 ESPP and its operation. This summary does not contain all of the terms and conditions of the 2024 ESPP and is qualified in its entirety by reference to the 2024 ESPP as set forth in *Annex H* attached to this proxy statement.

Purpose. The purpose of the 2024 ESPP is to provide eligible employees with an opportunity to purchase shares of the combined company's common stock through accumulated contributions, which generally will be made through payroll deductions. The 2024 ESPP permits the administrator (as discussed below) to grant purchase rights that qualify for preferential tax treatment under Section 423 of the Code. In addition, the 2024 ESPP authorizes the grant of purchase rights that do not qualify under Code Section 423 pursuant to rules, procedures or sub-plans adopted by the administrator that are designed to achieve desired tax or other objectives.

Authorized Shares. If the Graphite stockholders approve the 2024 ESPP, and subject to adjustment upon certain changes in the combined company's capitalization as described in the 2024 ESPP, the maximum number of shares of common stock that will be available for issuance under the 2024 ESPP will be 1,756,970 shares. The shares may be authorized, but unissued, or reacquired common stock. The number of shares of common stock available for issuance under the 2024 ESPP will be increased on the first day of each fiscal year beginning for the fiscal year following the fiscal year in which the first enrollment date under the 2024 ESPP (if any) occurs, in an amount equal to the least of (i) 2,635,455 shares, (ii) one percent (1%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the administrator.

As of February 12, 2024, the per share closing price of Graphite common stock was $2.97. Based upon a price per share of $2.97, the maximum aggregate market value that could potentially be issued under the 2024 ESPP at the effective time is $5,218,200.90.

We currently are unable to determine how long this share reserve may last because the number of shares that will be issued in any year or offering period depends on a variety of factors that cannot be predicted with certainty, including, for example, the number of employees who elect to participate in the 2024 ESPP, the level of contributions made by participants and the future price of shares of common stock.

If the Graphite stockholders do not approve the 2024 ESPP, then the 2024 ESPP will not become effective and no shares of common stock will be available for issuance thereunder.

Plan Administration. The combined company's board of directors or a committee appointed by the board of directors will administer the 2024 ESPP. The combined company's compensation committee will initially administer the 2024 ESPP. Subject to the terms of the 2024 ESPP, the administrator will have full and exclusive discretionary authority to construe, interpret and apply the terms of the 2024 ESPP, to delegate ministerial duties to any of the combined company's employees, to designate separate offerings under the 2024 ESPP, to designate subsidiaries and affiliates as participating in the Section 423 Component and the Non-Section 423 Component, to determine eligibility, to adjudicate all disputed claims filed under the 2024 ESPP and to establish such procedures that it deems necessary or advisable for the administration of the 2024 ESPP. The administrator is authorized to adopt rules and procedures in order to: determine eligibility to participate, determine the definition of compensation for the purposes of contributions to the 2024 ESPP, handle contributions to the 2024 ESPP, coordinate the making of contributions to the 2024 ESPP, establish bank or trust accounts to hold contributions to the 2024 ESPP, effect the payment of interest, effect the conversion of local currency, satisfy obligations to pay payroll tax, determine beneficiary designation requirements, implement and determine withholding procedures and determine procedures for the handling of stock certificates that vary with applicable local requirements. The administrator will also be authorized to determine that, to the extent permitted by applicable law, the terms of a purchase right granted under the 2024 ESPP or an offering to citizens or residents of a non-U.S. jurisdiction will be less favorable than the terms of options granted under the 2024 ESPP or the same offering to employees that reside solely in the United States. Every finding, decision and determination made by the administrator will, to the full extent permitted by law, be final and binding upon all parties.

Eligibility. Generally, all of the combined company's employees will be eligible to participate if they are customarily employed by us, or any participating subsidiary or affiliate, for at least 20 hours per week and more than five months in any calendar year, or any lesser number of hours per week and/or number of months in any calendar year established by the administrator (if required under applicable local law) for purposes of any separate offering or the Non-Section 423 component. The administrator, in its discretion, on a uniform and nondiscriminatory basis, may, prior to an enrollment date, for all options to be granted on such enrollment date in

an offering, determine that an employee who (i) has not completed at least two years of service (or a lesser period of time determined by the administrator) since his or her last hire date, (ii) customarily works not more than 20 hours per week (or a lesser period of time determined by the administrator), (iii) customarily works not more than five months per calendar year (or a lesser period of time determined by the administrator), (iv) is a highly compensated employee within the meaning of Section 414(q) of the Code, or (v) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to disclosure requirements under Section 16(a) of the Exchange Act, is or is not eligible to participate in such offering period.

However, an employee may not be granted rights to purchase shares of the combined company's common stock under the 2024 ESPP if such employee:

- immediately after the grant would own capital stock and/or hold outstanding options to purchase such stock possessing 5% or more of the total combined voting power or value of all classes of capital stock of ours or of any parent or subsidiary of ours; or
- holds rights to purchase shares of the combined company's common stock under all employee stock purchase plans of ours or any parent or subsidiary of ours that accrue at a rate that exceeds $25,000 worth of shares of the combined company's common stock for each calendar year in which such rights are outstanding at any time.

As of February 1, 2024, Graphite had approximately six employees. Following the closing of the merger, approximately 30 employees are expected to be eligible to participate in the 2024 ESPP.

Offering Periods. The 2024 ESPP will include a component that allows the combined company to make offerings intended to qualify under Section 423 of the Code and a component that allows the combined company to make offerings not intended to qualify under Section 423 of the Code to designated companies, as described in the 2024 ESPP. Offering periods will begin and end on such dates as established by the administrator (including the commencement and termination dates thereof) without stockholder approval if such change is announced prior to an enrollment date for all purchase rights to be granted on such enrollment date. No offering period may last more than 27 months.

Contributions. The 2024 ESPP will permit participants to purchase shares of the combined company's common stock through contributions (in the form of payroll deductions or otherwise to the extent permitted by the administrator) of up to 15% of their eligible compensation, a measure to be determined by the administrator, or such other limit established by the administrator from time to time in its discretion and on a uniform and nondiscretionary basis for all options to be granted on an enrollment date in an offering.

Exercise of Purchase Right. A participant's option for the purchase of shares of common stock will be exercised automatically on each exercise date, unless a participant withdraws from the 2024 ESPP (or participant's participation is terminated), and the maximum number of full shares of the combined company's common stock subject to the option will be purchased for such participant at the applicable purchase price with the accumulated contributions from his or her account. No fractional shares of common stock will be purchased. Any contributions accumulated in a participant's account, which are not sufficient to purchase a full share will be retained in the participant's account for the next purchase period or offering period and will be subject to earlier withdrawal by the participant. Any other funds left over in a participant's account after the exercise date will be returned to the participant. The Administrator may, for future offering periods, increase or decrease, in its absolute discretion, the maximum number of shares of common stock that an eligible employee may purchase during each purchase period and/or offering period, as applicable.

Termination of Participation. Participation in the 2024 ESPP generally will terminate when a participating employee's employment with the combined company or a designated company ceases for any reason, the

employee withdraws from the 2024 ESPP or the combined company's board terminates or amends the 2024 ESPP such that the employee no longer is eligible to participate. An employee may withdraw his or her participation in the 2024 ESPP at any time in accordance with procedures, and prior to any applicable deadline, specified by the administrator. Upon withdrawal from the 2024 ESPP, in general the employee will receive all amounts credited to his or her account without interest (unless otherwise required under applicable law) and his or her payroll withholdings or contributions under the 2024 ESPP will cease.

Non-Transferability. Neither contributions credited to a participant's account nor rights to purchase shares of common stock and any other rights and interests under the 2024 ESPP may be assigned, transferred, pledged or otherwise disposed of (other than by will, the laws of descent and distribution or beneficiary designation in the event of death). Any attempt at such prohibited disposition will be without effect, except that the combined company may treat such act as an election to withdraw participation.

Certain Transactions. In the event that any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of common stock or other securities, or other change in the combined company's corporate structure affecting the common stock or any similar equity restructuring transaction, as that term is used in Statement of FASB ASC Topic 718 (or any of its successors) affecting the shares of common stock occurs, the administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2024 ESPP in such manner it may deem equitable, will adjust the number and class of common stock that may be delivered under the 2024 ESPP, the purchase price per share, the number of shares of common stock covered by each purchase right under the 2024 ESPP that has not yet been exercised, and the numerical limits of the 2024 ESPP.

In the event of the combined company's proposed dissolution or liquidation, any ongoing offering periods will be shortened and will terminate immediately before consummation of the proposed dissolution or liquidation following the purchase of shares of common stock under the shortened offering periods, unless provided otherwise by the administrator. Prior to the new exercise date, the administrator will notify participants regarding the new exercise date and the exercise to occur on such date.

In the event of a merger or "change in control" (as defined in the 2024 ESPP), each outstanding option under the 2024 ESPP will be assumed or substituted for by the successor corporation or its parent or subsidiary. In the event that options are not assumed or substituted for, the offering period will be shortened by setting a new exercise date on which the offering period will end, which will occur prior to the closing of the merger or change in control. Prior to the new exercise date, the administrator will notify participants regarding the new exercise date and the exercise to occur on such date.

Amendment; Termination. The administrator will have the authority to amend, suspend or terminate the 2024 ESPP. The 2024 ESPP will continue in effect for a term of 20 years, unless terminated sooner. If the administrator determines that the ongoing operation of the 2024 ESPP may result in unfavorable financial accounting consequences, the administrator may modify, amend or terminate the 2024 ESPP to reduce or eliminate such accounting consequence. If the 2024 ESPP is terminated, the administrator in its discretion may terminate all outstanding offering periods either immediately or after consummation of the purchase of shares of common stock under the 2024 ESPP (which may be adjusted to occur sooner than originally scheduled), or in accordance with their terms. If options are terminated prior to their expiration, then all amounts credited to participants that have not been used to purchase shares of common stock will be returned, without interest (unless otherwise required under applicable law), as soon as administratively practicable.

Summary of U.S. Federal Income Tax Consequences

The following summary is intended only as a general guide to the material U.S. federal income tax consequences of participation in the 2024 ESPP. The summary is based on existing U.S. laws and regulations,

and there can be no assurance that those laws and regulations will not change in the future. The summary does not purport to be complete and does not discuss the tax consequences upon a participant's death, or the provisions of the income tax laws of any municipality, state or non-U.S. jurisdiction to which the participant may be subject. As a result, tax consequences for any particular participant may vary based on individual circumstances.

The 2024 ESPP is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Code. Under an employee stock purchase plan that so qualifies, no taxable income will be recognized by a participant, and no deductions will be allowable to the combined company, upon either the grant or the exercise of the purchase rights. Taxable income will not be recognized until there is a sale or other disposition of the shares of common stock acquired under the 2024 ESPP or in the event of the participant's death while still owning the purchased shares of common stock.

If the participant sells or otherwise disposes of the purchased shares of common stock within two years after the start date of the offering period in which the shares of common stock were acquired or within one year after the actual purchase date of those shares of common stock, then the participant generally will recognize ordinary income in the year of sale or disposition equal to the amount by which the fair market value of the shares of common stock on the purchase date exceeded the purchase price paid for those shares of common stock, and the combined company will be entitled to an income tax deduction equal in amount to such excess, for the taxable year in which such disposition occurs. The amount of this ordinary income will be added to the participant's basis in the shares of common stock, and any resulting gain or loss recognized upon the sale or disposition will be a capital gain or loss. If the shares of common stock have been held for more than one year since the date of purchase, the gain or loss will be long-term.

If the participant sells or disposes of the purchased shares of common stock more than two years after the start date of the offering period in which the shares of The combined company's common stock were acquired and more than one year after the actual purchase date of those shares of common stock, then the participant generally will recognize ordinary income in the year of sale or disposition equal to the lesser of (a) the amount by which the fair market value of the shares of common stock on the sale or disposition date exceeded the purchase price paid for those shares of common stock, or (b) 15% of the fair market value of the shares of common stock on the start date of that offering period. Any additional gain upon the disposition will be taxed as a long-term capital gain. Alternatively, if the fair market value of the shares of common stock on the date of the sale or disposition is less than the purchase price, there will be no ordinary income and any loss recognized will be a long-term capital loss. The combined company will not be entitled to an income tax deduction with respect to such disposition.

In addition, a participant's annual "net investment income," as defined in Section 1411 of the Code, may be subject to a 3.8% U.S. federal surtax. Net investment income may include capital gain and/or loss arising from the disposition of shares of common stock purchased under the 2024 ESPP. Whether a participant's net investment income will be subject to this surtax will depend on the participant's level of annual income and other factors.

If the participant still owns the purchased shares of common stock at the time of death, the lesser of (i) the amount by which the fair market value of the shares of common stock on the date of death exceeds the purchase price or (ii) 15% of the fair market value of the shares of common stock on the start date of the offering period in which those shares of common stock were acquired will constitute ordinary income in the year of death.

New Plan Benefits

Because participation in the 2024 ESPP is voluntary, the benefits or amounts that will be received by or allocated to any individual or group of individuals under the 2024 ESPP in the future are not determinable and no awards have been granted that are contingent on stockholder approval of the 2024 ESPP.

Required Vote

The affirmative vote of the holders of a majority of the votes properly cast by the holders of Graphite common stock for the 2024 ESPP Proposal is required to approve the 2024 ESPP Proposal. Abstentions and broker non-votes, if any, will have no effect on the 2024 ESPP Proposal.

The 2024 ESPP Proposal is conditioned on the approval of the Nasdaq Stock Issuance Proposal. Therefore, if approval of the merger is not obtained, the 2024 ESPP Proposal will have no effect, even if approved by Graphite stockholders.

THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE 2024 ESPP PROPOSAL.

When you consider the recommendation of the Graphite board of directors in favor of approval of the 2024 ESPP, you should keep in mind that certain of Graphite's directors and officers have interests in the 2024 ESPP that are different from, in addition to, or in conflict with, your interests as a stockholder, including, among other things, the existence of financial and personal interests, which may result in a conflict of interest on the part of such director(s) between what he, she or they may believe is in the best interests of Graphite and its stockholders and what he, she or they may believe is best for himself, herself or themselves in determining to recommend that stockholders vote for the proposals. In addition, Graphite' officers have interests in the merger that may conflict with your interests as a stockholder. See the section titled "*The Merger—Interests of Graphite's Directors and Executive Officers in the Merger*" beginning on page 174 of this proxy statement/prospectus for a further discussion of these considerations.

PROPOSAL NO. 5—THE ADJOURNMENT PROPOSAL

General

If Graphite fails to receive a sufficient number of votes to approve the Nasdaq Stock Issuance Proposal and/ or the Charter Amendment Proposal, Graphite may propose to adjourn the Graphite special meeting for the purpose of soliciting additional proxies to approve the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal. Graphite currently does not intend to propose adjournment at the Graphite special meeting if there are sufficient votes to approve the Nasdaq Stock Issuance Proposal and/or the Charter Amendment Proposal.

If a quorum is not present at the Graphite special meeting, under Graphite's bylaws, either the holders of voting stock representing a majority of the voting power present at the meeting or the chair of the Graphite special meeting will have the power to adjourn the Graphite special meeting until a quorum is present or represented.

Required Vote

The affirmative vote of a majority of the votes properly cast by the holders of Graphite common stock for the Adjournment Proposal is required to approve the Adjournment Proposal. Abstentions and broker non-votes, if any, will have no effect on the Adjournment Proposal.

The merger is **not** conditioned upon the approval of the Adjournment Proposal.

Unless otherwise instructed, it is the intention of the persons named in the accompanying proxy card to vote shares represented by properly executed proxy cards "**FOR**" the approval of the Adjournment Proposal.

THE GRAPHITE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE ADJOURNMENT PROPOSAL, IF NECESSARY.

GRAPHITE'S BUSINESS

Overview

Graphite has historically been a clinical-stage, next-generation gene editing company. In January 2023, Graphite announced a voluntary pause of its Phase 1/2 CEDAR study of nulabeglogene autogedtemcel ("nula-cel"), for sickle cell disease ("SCD") due to a serious adverse event in the first patient dosed, which Graphite concluded is likely related to study treatment. Nula-cel was being developed as a highly differentiated approach to treating SCD, with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

In February 2023, Graphite announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives. As a result of this decision, Graphite announced a corporate restructuring that resulted in an approximately 71.2% reduction in its workforce. As part of the corporate restructuring, Graphite also elected not to utilize the portion of its facilities space subject to its lease agreement with Bayside Area Development for purposes of its own operations.

In August 2023, Graphite entered into the LOA, pursuant to which Graphite granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. Graphite also entered into an asset purchase agreement (the "APA") pursuant to which it transferred to Maro its pre-clinical non-genotoxic conditioning program, including technology and intellectual property, while Graphite continued to explore strategic alternatives. On September 12, 2023, Graphite entered into an amendment to the LOA with Kamau, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option. Following these transactions, Graphite has no remaining ongoing development programs. However, Graphite continues to hold, maintain and preserve the technology, licenses and intellectual property related to its nula-cel program and related preclinical platform assets subject to Kamau's option using its remaining workforce.

In October 2023, Graphite entered into an amendment to the master lease, with Bayside Area Development, which provided for an accelerated termination of the lease. The amendment to the master lease also provided for a release of liabilities under the master lease, as well as a release of liabilities under the new sublease separately entered into in October 2023 for a portion of the facility, upon payment of a lump sum at the time of signing. Following this transaction, Graphite is no longer obligated for any rent payments under its master lease with Bayside Area Development.

After a comprehensive review of strategic alternatives, including identifying and reviewing potential candidates for a strategic transaction, on November 14, 2023, Graphite entered into the Merger Agreement with LENZ, pursuant to which Merger Sub will merge with and into LENZ, with LENZ surviving as Graphite's wholly-owned subsidiary. The merger was unanimously approved by Graphite's board of directors, and the Graphite board resolved to recommend approval of the Merger Agreement to Graphite's stockholders. The closing of the merger is subject to approval by Graphite and LENZ's stockholders, as well as other customary closing conditions, including the effectiveness of a registration statement filed with the SEC in connection with the transaction and Nasdaq's approval of the listing of the shares of the Graphite common stock to be issued in connection with the transaction. If the merger is completed, the business of LENZ will continue as the business of the combined company.

Graphite's future operations are highly dependent on the success of the merger and there can be no assurances that the merger will be successfully consummated. There can be no assurance that the strategic review process or any transaction relating to a specific asset, including the merger or any Graphite asset sale, will result in Graphite pursuing such a transaction(s), or that any transaction(s), if pursued, will be completed on terms favorable to Graphite and its stockholders in the existing Graphite entity or any possible entity that results from a combination of entities. If the strategic review process is unsuccessful, its board of directors may decide to pursue a dissolution and liquidation of Graphite.

Graphite's Historical Operations and Product Candidates

Graphite's historical technology was built on first-generation proven CRISPR technology to achieve high rates of targeted gene integration. Graphite's platform technology includes patent rights and proprietary technology exclusively licensed from The Board of Trustees of the Leland Stanford Junior University ("Stanford") and developed in the Stanford laboratories of two of its scientific founders, both pioneers in gene therapy and gene editing: Matthew Porteus, M.D., Ph.D., and Maria Grazia Roncarolo, M.D. Dr. Porteus is considered to be one of the founders of the field of gene editing and was a scientific founder of CRISPR Therapeutics AG. He was the first to demonstrate that an engineered nuclease could be used to correct genes by harnessing precision cellular DNA repair machinery. Dr. Roncarolo is a pioneer in multipotent hematopoietic stem cell ("HSC") gene therapy and her work led to the first approved HSC gene therapy product. She established and is Director of the Stanford Center for Definitive and Curative Medicine to treat patients with currently incurable diseases through the development of innovative stem cell- and gene-based therapies. Drs. Porteus and Roncarolo, both practicing physicians, came together with the conviction that targeted gene integration could lead to an entirely new class of potentially curative therapies.

Graphite's approach was designed to have broad therapeutic applications and enable high-efficiency targeted gene integration in a wide range of primary human cell types. In its initial programs, Graphite applied its approach ex vivo in a patient's own HSCs which are reinfused after gene integration ("autologous HSCT"). HSCs are multipotent stem and progenitor cells that can give rise to all cells of the blood and immune system and have proven their curative potential across dozens of diseases as demonstrated by allogenic HSC transplant ("allo-HSCT").

Graphite considered that its technology could be applied in the following three key settings: Gene Correction, Gene Replacement, and Targeted Gene Insertion.

Gene Correction: nulabeglogene autogedtemcel ("nula-cel") for the Treatment of SCD

Nula-cel was a next generation gene-edited autologous HSC product candidate that was designed to directly correct the mutation responsible for SCD. The mortality and morbidity associated with SCD, all caused by a single mutation, has made curing SCD by direct gene correction a dream of many clinicians. Indeed, multiple genetic therapies are in development to address SCD, but due to technical limitations of other approaches, these therapies are primarily focused on expressing alternate hemoglobin genes such as fetal hemoglobin or a transgenic hemoglobin. Graphite's approach was the first in industry to directly correct the SCD-causing mutation to restore normal adult hemoglobin expression. In January 2023, Graphite announced a voluntary pause of its Phase 1/2 CEDAR study of its lead product candidate nula-cel due to a serious adverse event in the first patient dosed, which Graphite concluded was likely related to study treatment. In February 2023, Graphite announced its decision to discontinue the development of nula-cel.

Gene Replacement: GPH102 for the Treatment of Beta-Thalassemia and GPH201 for the Treatment of XSCID

GPH102 was Graphite's research program for the treatment of beta-thalassemia, leveraging its gene replacement platform technology by replacing one or both copies of the mutated beta-globin ("HBB") gene through HDR to restore HgbA expression to levels similar to healthy individuals who do not have disease or to individuals who carry one copy of the mutated HBB gene ("beta-thalassemia trait"). Alternative genetic therapies are in clinical development to address beta-thalassemia, but in general due to technical limitations, these potential therapies are indirect and are focused on expressing alternate hemoglobin genes such as fetal hemoglobin ("HgbF") or a transgenic hemoglobin without correcting the underlying genetic lesions. Given this program leveraged the same gene editing platform technology as nula-cel, Graphite does not currently intend to continue development of this program.

GPH201 was an investigational next generation gene-edited autologous HSC product candidate for the treatment of XSCID. XSCID is a rare, life-threatening disease where multiple mutations in a single gene prevent

the formation of multiple interleukin receptors resulting in defects in immune cell formation. As a consequence, severe, persistent, or recurrent early-onset infections are the hallmark of XSCID. Without treatment, infants with XSCID usually do not live beyond one year of age. Allogeneic HSCT that results in functional reconstitution of the immune system is the only curative treatment for XSCID, but the procedure has limitations including identification of an HLA matched sibling donor as well as potential complications of GvHD and subsequent poor immune reconstitution. An effective targeted genetic therapy would need to replace a large portion of the IL2RG gene in order to be effective across XSCID patients with different IL2RG mutations. The goal of GPH201 was to replace a sufficient quantity of a patient's HSCs with gene edited cells to eliminate the symptoms of, and potentially cure, XSCID. Given this program leveraged the same gene editing platform technology as nula-cel, Graphite has terminated the development of this program.

Targeted Gene Insertion with Therapeutic Protein Production ("CCR5 Safe Harbor Locus"): GPH301 for the Treatment of Gaucher Disease

Graphite's GPH301 product candidate was a next generation gene-edited autologous HSC product candidate from its CCR5 locus technology for the treatment of Gaucher disease, an autosomal recessive genetic disorder caused by mutations in the GBA gene which encodes GCase. GCase is an enzyme responsible for degrading glucocerebroside, a cell membrane building block, into glucose and lipids within lysosomes of cells. In patients with Gaucher disease, lack of GCase leads to accumulation of glucocerebroside in macrophages resulting in inflammation that impacts the liver, spleen and bone marrow. Given this program leverages the same gene editing platform technology as nula-cel, Graphite has terminated the development of this program.

Manufacturing

Graphite has no commercial manufacturing capabilities. For its initial clinical programs, Graphite used qualified third-party contract manufacturing organizations with relevant manufacturing experience in genetic medicines. Graphite established manufacturing processes for nula-cel and established relationships with third-party manufacturers with capabilities to manufacture the necessary Drug Substance and Drug Product in accordance with cGMP. Since Graphite has no ongoing development programs, Graphite is in the process of terminating its manufacturing-related relationships. However, Graphite continues to hold, maintain and preserve the technology, licenses and intellectual property related to its nula-cel program and related preclinical platform assets subject to Kamau's option using its remaining workforce.

Competition

Graphite competes in the segments of the pharmaceutical, biotechnology, and other related markets that utilize technologies encompassing genomic medicines to create therapies, including gene editing and gene therapy. There are several other companies advancing gene editing and gene therapy product candidates in preclinical or clinical development in sickle cell disease, including Beam Therapeutics Inc., bluebird bio, Inc., Cellectis SA, CRISPR Therapeutics AG, and Editas Medicine, Inc. Companies advancing gene editing and gene therapy programs in beta-thalassemia include bluebird bio, Inc., CRISPR Therapeutics AG, and Edigene Inc. Companies advancing gene therapy programs in XSCID include Mustang Bio, Inc. Companies advancing gene therapy programs in Gaucher disease include AVROBio, Inc. and Freeline Therapeutics Holdings plc. Companies advancing gene editing and gene therapy programs in preclinical development for AAT deficiency include Beam Therapeutics Inc., Editas Medicine, Inc., Intellia Therapeutics, Inc., Krystal Biotech Inc., Apic Bio Inc., and LogicBio Therapeutics Inc. Companies combining CRISPR with HDR (homology directed repair) include CRISPR Therapeutics AG, which, for oncology applications, inserts a chimeric antigen receptor ("CAR") construct into the TCR alpha constant ("TRAC") locus in T-cells using HDR. Additionally, an academic collaboration between the University of California, San Francisco and the University of California, Los Angeles is seeking to correct the sickle cell mutation using CRISPR followed by delivery of a single-stranded oligonucleotide DNA donor to potentially harness HDR. Because these competitors, as well as other companies and research institutions, hold numerous patents in this field, it is possible that these or other third parties could

allege they have patent rights encompassing its product candidates, technologies or methods. For more information regarding competition and intellectual property, please see the section titled *"Risk Factors—Risks Related to Graphite's Intellectual Property."*

Intellectual Property

Graphite's business depends in part on its ability to preserve the confidentiality of its trade secrets, and operate without infringing, misappropriating or otherwise violating any valid and enforceable intellectual property rights of others. In addition, Graphite's historical business depended in part on its ability to obtain and maintain proprietary protection for its platform technology, its programs, and know-how related to its business, and defend and enforce its intellectual property rights, in particular, its patent rights. For more information regarding the risks related to its intellectual property, please see section titled *"Risk Factors—Risks Related to Graphite's Intellectual Property."*

Graphite's wholly owned and its in-licensed patent applications cover various aspects of its genome editing platform and proprietary components, as well as its programs directed to genome modification using chemically modified guide RNAs. Graphite does not intend to continue to pursue patent protection on this technology.

As of September 30, 2023, Graphite in-licensed from Stanford two issued U.S. patents and two pending U.S. patent applications, issued patents in Australia, Europe and China, and pending patent applications in Australia, Canada, China, Japan and South Korea directed to methods of genome modification using chemically modified guide RNA in primary cells. The in-licensed patents and patent applications, which are jointly owned by Stanford and Agilent, also relate to methods of using such genome modifications for therapeutic indications such as SCD and thalassemia. Graphite's current in-licensed patents and patent applications from Stanford, if the appropriate maintenance fees are paid, are expected to expire 2036, excluding any additional term for patent term adjustments or patent term extensions. The in-licensed European patent is currently subject to an opposition proceeding at the European Patent Office ("EPO") Opposition Division, initiated by multiple opponents.

As of September 30, 2023, Graphite in-licensed three U.S. patents, two U.S. patent applications, and patent applications in Australia, Canada, China, Europe, Japan and South Korea directed to compositions involving high-fidelity nucleases, gene editing systems using mutant Cas9 nucleases, and improved methods of gene editing thereof from IDT. Graphite's current in-licensed patent and patent applications from IDT, if the appropriate maintenance fees are paid, are expected to expire in 2037, excluding any additional term for patent term adjustments or patent term extensions.

In August 2023, Graphite entered into the LOA, pursuant to which it granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. Graphite's licenses from Stanford and IDT are included in the assets that are subject to the LOA and may be assigned to Kamau party if and when it exercises the option.

For more information regarding its licensed patent applications, please see the sections titled *"Graphite's Material Agreements"* and *"Risk Factors—Risks Related to Graphite's Intellectual Property."*

Graphite also relies on trade secrets, know-how, continuing technological innovation, and confidential information to develop and maintain its proprietary position and protect aspects of its business that are not amenable to, or that Graphite does not consider appropriate for, patent protection. Graphite seeks to protect its proprietary technology and processes, in part, by confidentiality agreements with its employees, consultants, scientific advisors, and contractors. Graphite also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of its premises and physical and electronic security of its information technology systems. While Graphite has implemented measures to protect and preserve its trade secrets, such measures can be breached, and Graphite may not have adequate remedies for any such breach. In addition, Graphite's trade secrets may otherwise become known or be independently discovered by competitors.

Graphite's Material Agreements

The following are summaries of the material terms of certain agreements that were or are material to Graphite's historical business and operations as described elsewhere in this proxy statement/prospectus.

Service Agreement with WuXi Advanced Therapies Inc.

In November 2022, Graphite entered into a Master Development and Manufacturing Services Agreement ("WuXi Agreement") with WuXi Advanced Therapies Inc. ("WuXi"), pursuant to which Graphite agreed that, for a term of five years (which is extendable by mutual written agreement of the parties) and subject to certain conditions, WuXi and certain of its affiliates will provide product candidate development and manufacturing services on a project-by-project basis. Such services and their pricing terms will be agreed upon between WuXi and Graphite pursuant to one or more work orders executed in accordance with the WuXi Agreement. The WuXi Agreement may be terminated by either party for any reason upon at least 90 days written notice, and Graphite may terminate any work order under the WuXi Agreement upon at least 30 days written notice. In addition, each party has the ability to terminate the WuXi Agreement upon the occurrence of certain conditions.

The WuXi Agreement includes customary provisions relating to indemnification, intellectual property protection, confidentiality, remedies, and representations and warranties, as well as certain quality requirements.

On November 7, 2022, Graphite entered into a work order under the WuXi Agreement under which Graphite will receive services for nula-cel, manufacturing engineering test runs, the use of a manufacturing suite at WuXi's GMP facility located in Philadelphia, PA, and Phase 1/2 CEDAR clinical development and manufacturing of nula-cel.

Graphite has sent a notice of termination of the WuXi Agreement, effective January 23, 2024.

Exclusive License Agreement with the Board of Trustees of the Leland Stanford Junior University

In December 2020, Graphite entered into an exclusive license agreement (the "License Agreement"), with The Board of Trustees of the Leland Stanford Junior University ("Stanford"), pursuant to which Stanford granted Graphite a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

To date, pursuant to the License Agreement, Graphite has paid an upfront license fee to Stanford of $50.0 thousand and issued to Stanford and its designees an aggregate of approximately 0.6 million shares of its common stock. The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020. Graphite is obligated to pay Stanford an annual license maintenance fee on each anniversary of the effective date of the License Agreement. The annual license maintenance fee initially is $5.0 thousand and will increase to $50.0 thousand in three increments over the first seven anniversaries of the effective date of the License Agreement. After the first commercial sale of a product falling within the scope of the license (the "Licensed Product"), the annual license maintenance fee is $200.0 thousand.

In May 2021, Graphite issued 640,861 shares of its common stock in connection with the License Agreement. Subsequently, in June 2021, related to the License Agreement, Graphite repurchased 624,845 shares of its common stock from investors and founders.

Graphite is required to share with Stanford a portion of any non-royalty income Graphite receives from sublicensing the licensed patent rights or technology, subject to specified exclusions. With respect to sublicenses granted to products for the treatment of SCD, XSCID and beta thalassemia, the portion of sublicense income Graphite must share with Stanford varies by indication and declines from between a mid-teen to a second quartile double-digit percentage prior to the filing of an IND to between a high single-digit to very low double-digit percentage upon achievement of a specified clinical milestone. With respect to sublicenses granted under the licensed technology rights and not licensed patent rights, the portion of sublicense income shared with Stanford declines from between a mid-single-digit and very low double-digit percentage prior to the filing of an IND to a low single-digit percentage after filing of an IND.

Graphite is obligated to make payments to Stanford with respect to each Licensed Product of up to an aggregate of $12.8 million upon the achievement of certain development, regulatory and commercial milestones. Such amounts are payable only once upon the first occurrence of a particular milestone event with respect to each Licensed Product and only once with respect to each new indication covered by any of the Licensed Products.

Graphite also is obligated to pay Stanford low single-digit royalties based on worldwide annual net sales of any Licensed Product, subject to specified reductions. Graphite will be obligated to continue to pay royalties on a Licensed Product-by-Licensed Product and country-by-country basis, until the latest of (i) the expiration of the last valid claim under the licensed patents that covers the sale or manufacture of such Licensed Product in such country, (ii) the expiration of any period of regulatory exclusivity with respect to such Licensed Product in such country or (iii) the expiration of ten years after the first commercial sale of such Licensed Product in such country.

The term of the License Agreement expires on the later of (i) the expiration of the last patent or abandonment of the last patent application within the license patent rights or (ii) the expiration of all royalty terms with respect to Licensed Products. The License Agreement may be terminated by Graphite at will or by Stanford if Graphite remains in breach of the License Agreement following a cure period to remedy the breach.

Graphite is required to use diligent efforts to manufacture, market and sell Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. In addition, Graphite is required to achieve specified milestones by specified dates with respect to Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. If Graphite fails to satisfy its diligence obligations, Stanford may terminate the License Agreement for its breach.

In August 2023, Graphite entered into the LOA, pursuant to which it granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. The License Agreement is included in the assets that are subject to the LOA and may be assigned to Kamau if and when it exercises the option.

Option Agreements with Stanford

First Option Agreement

In January 2021, Graphite entered into an option agreement (the "First Option Agreement") with Stanford, pursuant to which Stanford granted Graphite the right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. The option may be extended to specified technology at a later date and upon its agreement with Stanford. Graphite may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights. Subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia and non-exclusive with respect to all other human prophylactic and therapeutic products.

Pursuant to the First Option Agreement, Graphite agreed to grant Stanford 132,137 shares of its common stock if Graphite exercises the option and executes and delivers an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology. Other than such shares of its common stock and a license execution fee of $10.0 thousand if Graphite exercises the option with respect to a particular optioned patent right, no additional payments have been or will be made by Graphite to Stanford under the First

Option Agreement or upon the execution of an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology. The terms of the License Agreement will apply to any Licensed Products falling within the patent rights and technology licensed by Graphite upon exercise of the option.

The term of the First Option Agreement expires 18 months after its effective date, subject to its right to extend such expiration date by up to an additional one-year periods upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the License Agreement terminates. The First Option Agreement also may be terminated by Graphite at will. On June 23, 2022, Graphite exercised its right to extend the term of the First Option Agreement for an additional year. As of March 1, 2023, Graphite had not exercised the option under the First Option Agreement and no fees have been paid for the First Option Agreement.

On June 6, 2023, the Company and Stanford agreed to extend the term of the First Option Agreement for another additional year.

In August 2023, Graphite entered into the LOA, pursuant to which it granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. The First Option Agreement is included in the assets that are subject to the LOA and may be assigned to Kamau if and when it exercises the option.

Second Option Agreement

In April 2021, Graphite entered into another option agreement (the "Second Option Agreement") with Stanford, pursuant to which Stanford granted Graphite the exclusive right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. The option may be extended to specified technology at a later date and upon its agreement with Stanford. Graphite may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights, subject to a specified waiting period with respect to certain specified patent rights. Subject to retained rights by Stanford and in the case of specified patent rights, the Department of Veterans Affairs, the license will be exclusive with respect to human prophylactic and therapeutic products for the treatment of Gaucher Disease, other diseases treated through insertion of a construct into the CCR5 locus, and diseases treated through insertion of a construct into the alpha globin locus. The license is non-exclusive with respect to all other human prophylactic and therapeutic products.

Pursuant to the Second Option Agreement, Graphite agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. If Graphite exercises the option with respect to a particular optioned patent right, Stanford and Graphite would negotiate in good faith the terms of a license agreement or an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology. The terms of the license agreement or amendment could include additional payments to Stanford in excess of those set forth in the License Agreement.

The term of the Second Option Agreement expires 12 months after its effective date, subject to its right to extend such expiration date by two additional one-year periods upon notice to and the reasonable agreement of Stanford. The Second Option Agreement may be terminated by Graphite at will or by Stanford if Graphite remains in breach of the Second Option Agreement following a cure period to remedy the breach. The Second Option Agreement also will terminate automatically in the event of a filing of a bankruptcy petition by or against Graphite. On April 13, 2022, Graphite entered into an amendment to the Second Option Agreement which extended the term for an additional year and the maintenance fee of $10.0 thousand was paid in the three and six months ended June 30, 2022. On March 8, 2023, the Company terminated the Second Option Agreement without exercising the option to negotiate a license for additional technologies from Stanford.

Graphite is required to use diligent efforts to conduct research on potential commercial applications of the optioned patents and any optioned technology. In addition, Graphite is required to use reasonable efforts to achieve specified milestones during the term of the Second Option Agreement with respect to products

incorporating two of therapeutic approaches covered by the optioned patent rights. Graphite's diligence obligations are subject to good faith discussions regarding their modification upon any extension of the term of the Second Option Agreement by Graphite. If Graphite fails to satisfy its diligence obligations Stanford may terminate the Second Option Agreement for its breach.

License Agreement with Integrated DNA Technologies, Inc.

In June 2021, Graphite entered into a License Agreement (the "IDT License Agreement") with Integrated DNA Technologies, Inc. ("IDT"). Pursuant to the IDT License Agreement, IDT granted to Graphite and its affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic applications for SCD, XSCID and Gaucher disease (the "Field") and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. Graphite was also granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

Graphite is solely responsible for the development, manufacture, regulatory approval and commercialization of the products in the Field and are required to use commercially reasonable efforts to achieve certain regulatory and commercial milestones with respect to licensed products.

In the event Graphite does not achieve the applicable milestones within a specified time period, then, except with respect to the field of human therapeutic applications for SCD for which Graphite had previously filed an IND, the exclusive license granted to Graphite described above will immediately convert to a non-exclusive, non-sublicensable license, and all sublicenses granted by Graphite to any sublicensees will immediately terminate.

In consideration of the licenses and rights granted to Graphite under the IDT License Agreement, Graphite agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if Graphite expands the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, Graphite has agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances, and a low double digit percentage payment for certain sublicense revenue, which is also subject to reduction in the event a sublicense includes other patent rights that are not patents licensed from IDT. As of December 31, 2022 and 2021, Graphite has not achieved any of the regulatory milestones and have only paid the upfront license payment of $3.0 million.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. Graphite and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, Graphite may terminate the IDT License Agreement for any reason.

Graphite's current in-licensed patent and patent applications from IDT, if the appropriate maintenance fees are paid, are expected to expire in 2037, excluding any additional term for patent term adjustments or patent term extensions.

The IDT License Agreement includes customary representations and warranties by each party as are customarily found in transactions of this nature, including as to the licensed intellectual property. The IDT License Agreement also provides for certain mutual indemnities for breaches of representations, warranties and covenants.

In August 2023, Graphite entered into the LOA, pursuant to which it granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. The IDT License Agreement is included in the assets that are subject to the LOA and may be assigned to Kamau if and when it exercises the option.

Asset Purchase Agreement with Maro Bio Inc.

On August 1, 2023, Graphite entered into the APA with Maro pursuant to which Graphite sold to Maro, concurrently with the execution of the APA, certain assets related to Graphite's non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million as well as certain transition services to be provided by Graphite or Maro. Under the APA, Maro will also pay Graphite a sub single digit percentage cash royalty of worldwide net sales of certain products incorporating the acquired technology. The royalty term will terminate on a product-by-product and country-by-country basis on the latest of (i) the ten (10) year anniversary of the first commercial sale of such product in such country, (ii) the expiration of the last-to-expire valid claim of a transferred patent that covers such product in such country, and (iii) the expiration of regulatory exclusivity with respect to such product in such country. The APA also includes customary representations and warranties, covenants and indemnification obligations for a transaction of this nature.

License and Option Agreement with Kamau Therapeutics, Inc.

On August 4, 2023, Graphite entered into the LOA with Kamau pursuant to which Graphite exclusively licensed to Kamau, and granted Kamau, an option to acquire certain intellectual property and materials related to Graphite's nula-cel program and related pre-clinical platform assets. The option includes rights to assume the License Agreement and the First Option Agreement with Stanford, as well as the IDT License Agreement, among other agreements. Exercise of the option is contingent on Kamau raising a minimum of $10 million in funds no later than August 4, 2024 (the "Financing Milestone"), which contingency may be waived by Graphite. All rights to the intellectual property and materials will revert to Graphite if the milestone is not achieved or if Kamau elects not to exercise the option. In return for this license and option, Graphite received an equity interest in Kamau representing 20% of all outstanding shares on a fully diluted basis subject to dilution protection until the Financing Milestone. The LOA includes customary representations and warranties, limitations of liability and indemnification obligations for a transaction of this nature. The LOA automatically expires upon the first to occur of: (1) Kamau' exercise of the option, (2) Kamau' failure to exercise the option within a specified exercise period following achievement of the financing milestone, or (3) Kamau' failure to achieve the financing milestone by the pre-agreed deadline. In addition, either party has the right to terminate the LOA for the uncured material breach or insolvency of the other party, and Graphite has the right to terminate the LOA if Kamau challenges any of the patent rights that are subject to the option. As a result of the 20% equity interest, Graphite has the ability to exert significant influence over Kamau and accounts for the interest as an equity method investment. Graphite records its proportionate share of investee' equity in earnings or losses based on the most recently available financial information. On September 12, 2023, Graphite and Kamau entered into an amendment to the LOA, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option.

Sublease Agreement with Soleil Labs, LLC

In October 2023, Graphite entered into a sublease agreement (the "Sublease") with Soleil Labs, LLC ("Tenant") for certain premises constituting approximately 32,113 square feet of space in the building located at 233 E. Grand Avenue, South San Francisco, California (the "Premises"). Graphite leases approximately 85,165 square feet of office space in the building located at 233 E. Grand Avenue, South San Francisco, California pursuant to a Lease dated as of December 16, 2021 (as amended, the "Master Lease"), by and between the Company and Bayside Area Development, LLC (the "Landlord"). The term of the Sublease (the "Term") commences on October 26, 2023 (the "Effective Date") and expires on December 31, 2024. Pursuant to the Sublease, Tenant agrees to make rent payments directly to the Landlord in the amount of $183,044.10 per month for the first twelve months and $189,450.64 per month for the remainder of the Term. The rights and obligations of Tenant under the Sublease are subject to the terms of the Master Lease.

In connection with the execution of the Sublease, the Landlord consented to the execution of the Sublease, agreed to perform all of Graphite's obligations under the Sublease, and indemnified Graphite from any liability under the Sublease. The Tenant also agreed not to hold Graphite liable under the Sublease.

At the same time, Graphite also entered into a First Amendment to Lease with the Landlord (the "Lease Amendment") to adjust the timeline for certain payments under the Master Lease and to effect the acceleration of the termination date of the Master Lease. The Lease Amendment provides that the Master Lease will terminate on December 31, 2024, and that the Landlord may further accelerate the termination date for the premises not subject to the Sublease by delivering written notice and paying Graphite $20,000 per month for each month of further acceleration.

As consideration for Landlord's agreement to enter into the Lease Amendment, Graphite has agreed to: (a) on the termination date, surrender the premises to the Landlord and convey all the furniture and equipment in the premises to the Landlord, subject to the interests of the Tenant, (b) upon execution of the Lease Amendment, prepay all remaining amounts payable during the term of the Master Lease (including the difference between the rent obligations due under the Master Lease and the rent to be paid by Tenant under the Sublease for the Premises), in an amount equal to $15,928,490, and (c) pay to the Landlord a lease termination payment of approximately $20,776,078. To the extent Graphite has made any rent payments pursuant to the Master Lease after October 31, 2023, such amounts shall be recalculated to take into account and provide a credit for any such rent payment. Graphite will have no further rent obligations to Landlord pursuant to the Master Lease following the Effective Date, and the Landlord will return Graphite's letter of credit under the Master Lease within 60 days following the Effective Date.

Government Regulation

The FDA and other regulatory authorities at federal, state and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of biologics such as those Graphite has been developing.

U.S. Biologics Regulation

In the United States, the FDA regulates biological products under the Federal Food, Drug, and Cosmetic Act ("FDCA"), and the Public Health Service Act ("PHSA"), and their implementing regulations. Biological products are also subject to other federal, state, local and foreign statutes and regulations. Graphite, along with third-party contractors, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which Graphite wishes to conduct studies or seek approval or licensure of its product candidates. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may result in delays to the conduct of a study, regulatory review and approval or subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, license suspension or revocation, refusal to allow an applicant to proceed with clinical trials, imposition of a clinical hold, issuance of untitled or warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations or penalties.

Product candidates such as those Graphite was previously developing, must be approved by the FDA through the Biologics License Application ("BLA"), process before they may be legally marketed in the United States. The process required by the FDA before biological product candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and animal studies performed in accordance with applicable regulations, including the FDA's Good Laboratory Practices ("GLPs"), regulations and standards;
- submission to the FDA of an IND application, which must become effective before clinical trials may begin;
- approval by an independent institutional review board ("IRB") or ethics committee representing each clinical site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, Good Clinical Practices ("GCPs"), and other clinical trial-related regulations to establish the safety, purity and potency of the proposed biological product candidate for its intended purpose;
- preparation of and submission to the FDA of a BLA, which includes not only the results of the clinical trials, but also, detailed information on the chemistry, manufacture and quality controls for the product candidate and proposed labeling;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the proposed product is produced to assess compliance with current Good Manufacturing Practice requirements ("cGMPs") and to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity, and of selected clinical trial sites that generated the data in support of the BLA to assess compliance with the FDA's GCPs;
- satisfactory completion of an FDA Advisory Committee review, if applicable; and
- FDA review and approval, or licensure, of a BLA to permit commercial marketing of the product for particular indications for use in the United States.

Preclinical and Clinical Development

Prior to beginning the first clinical trial with a product candidate, a sponsor must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol or protocols for preclinical studies and clinical trials. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamic characteristics of the product, chemistry, manufacturing and controls information, and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. The FDA may also impose clinical holds on a product candidate at any time before or during clinical trials due to safety concerns, non-compliance, or other issues affecting the integrity of the trial. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial and, once begun, issues may arise that could cause the trial to be suspended or terminated.

In addition to the submission of an IND to the FDA before initiation of a clinical trial in the United States, certain human clinical trials involving recombinant or synthetic nucleic acid molecules are subject to oversight at the local level as set forth in the National Institutes of Health ("NIH"), Guidelines for Research Involving

Recombinant or Synthetic Nucleic Acid Molecules ("NIH Guidelines"). Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an Institutional Biosafety Committee ("IBC"), a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding for recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, dosing procedures, subject selection and exclusion criteria, and the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB or ethics committing at or servicing each site at which the clinical trial will be conducted must review and approve the plan for any clinical trial before the clinical trial begins at that site, and must monitor the study until completed. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy.

There are also requirements governing the reporting of ongoing preclinical studies and clinical trials and clinical study results to public registries. Sponsors of certain clinical trials of FDA-regulated products, including biologics, are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov.

Clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1.* The investigational product is typically administered to a small number of healthy volunteers. For gene therapies, the investigational product is typically initially introduced into patients with the target disease or condition. These trials are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with the investigational product, and, if possible, to gain early evidence on effectiveness.
- *Phase 2.* The investigational product is typically administered to a limited patient population to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks.
- *Phase 3*. The investigational product is typically administered to an expanded patient population to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for physician labeling. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of a BLA.

When these phases overlap or are combined, the trials may be referred to as Phase 1/2 or Phase 2/3.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be made a condition to approval of the BLA. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication and further document clinical benefit in the case of drugs approved under accelerated approval regulations. Failure to exhibit due diligence with regard to conducting Phase 4 clinical trials could result in withdrawal of approval for products.

Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the characteristics of the product candidate, and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical study investigators. Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the biologic, findings from animal or in vitro testing that suggest a significant risk for human subjects, and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure.

The FDA, the sponsor or the IRB or may suspend a clinical study at any time on various grounds, including a finding that the research patients or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical study at its institution if the clinical study is not being conducted in accordance with the IRB's requirements or if the biological product candidate has been associated with unexpected serious harm to patients. Additionally, if the trial is being overseen by a data safety monitoring board or committee, this group may recommend halting the clinical trial if it determines that there is an unacceptable safety risk for subjects or on other grounds, such as interim data suggesting a lack of efficacy.

BLA Submission and Review

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, preclinical studies and clinical trials are submitted to the FDA as part of a BLA requesting approval to market the product candidate for one or more indications. The BLA must include all relevant data available from preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product candidate's chemistry, manufacturing, controls, and proposed labeling, among other things. Under the Prescription Drug User Fee Act ("PDUFA"), as amended, each BLA must be accompanied by a significant application user fee to the FDA, unless a waiver or exemption applies, which is adjusted on an annual basis. The FDA has sixty days from the applicant's submission of a BLA to either issue a refusal to file letter or accept the BLA for filing, indicating that it is sufficiently complete to permit substantive review. The FDA has substantial discretion in the approval process and may refuse to accept any application or decide that the data is insufficient for approval, and may require additional preclinical, clinical or other studies before it accepts the filing.

Once a BLA has been accepted for filing, the FDA's goal is to review standard applications within ten months after it accepts the application for filing, or, if the application qualifies for priority review, six months after the FDA accepts the application for filing. In both standard and priority reviews, the review process may be significantly extended by FDA requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether a product candidate is safe, pure and potent for its intended use, and whether the facility in

which it is manufactured, processed, packed or held meets standards designed to assure and preserve the product's identity, safety, strength, quality, and purity. The FDA may convene an advisory committee, typically a panel that includes clinicians and other experts, to provide clinical insight on applications which present difficult questions of safety or efficacy and to review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving a BLA, the FDA will conduct a pre-approval inspection of the facility or facilities where the product is manufactured to determine whether the facilities comply with cGMPs. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically audit data from clinical trials to ensure compliance with GCPs. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates a BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be manufactured, the FDA may issue an approval letter or a Complete Response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the deficiencies that the FDA has identified in the BLA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the Complete Response letter without first conducting required inspections, testing submitted product lots and/or reviewing proposed labeling. In issuing the Complete Response letter, the FDA may recommend actions that the applicant might take to place the BLA in condition for approval, including requests for additional information or clarification, which may include the potential requirement for additional clinical studies and/or other significant and time-consuming requirements related to preclinical studies and manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, withdraw the application or request a hearing. Even if such data and information is submitted, the FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for a particular indication(s) and may entail limitations on the indicated uses for which such product may be marketed. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling or may condition the approval of the BLA on other changes to the proposed labeling, development of adequate controls and specifications, or a commitment to conduct post-market testing or clinical trials and surveillance to monitor the effects of approved products. The FDA may also place other conditions on approvals including the requirement of a Risk Evaluation and Mitigation Strategy ("REMS"), to assure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Once approved, the FDA may withdraw the product approval if compliance with pre-and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying product candidates. The fast track program is intended to expedite or facilitate the process for reviewing new product candidates that meet certain criteria. Specifically, product candidates are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and nonclinical or clinical data demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. A sponsor may request fast track designation of a product candidate concurrently with, or at any time after, submission of an IND, and the FDA must determine if the product candidate qualifies for such designation within 60 day of receipt of the sponsor's request. The sponsor of a fast track product has opportunities for frequent interactions with the FDA review team during product development and, once a BLA is submitted, the product may be eligible for priority review. A fast track product may also be eligible for rolling review, where the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product candidate can receive breakthrough therapy designation if it is intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product, alone or in combination with one or more other drugs or biologics, may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. A sponsor may request that a product candidate be designated as a breakthrough therapy concurrently with, or at any time after, the submission of an IND, and the FDA must determine if the product candidate qualifies for breakthrough therapy designation within 60 days of receipt of the sponsor's request. The benefits of breakthrough therapy designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product, including involvement of senior managers and experienced review staff in a cross-disciplinary review.

As part of the 21st Century Cures Act, Congress amended the FDCA to create an expedited development program for RMATs, which include cell therapies, therapeutic tissue engineering products, human cell and tissue products, and combination products using any such therapies or products. Gene therapies, including genetically modified cells that lead to a sustained effect on cells or tissues may meet the definition of a RMAT. The RMAT program is intended to facilitate efficient development and expedite review of RMATs, which are intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition. A sponsor may request that FDA designate a product candidate as a regenerative medicine advanced therapy concurrently with or at any time after submission of an IND. FDA has 60 calendar days to determine whether the drug meets the criteria, including whether there is preliminary clinical evidence indicating that the drug has the potential to address unmet medical needs for a serious or life-threatening disease or condition. A new drug application or a BLA for a RMAT may be eligible for priority review or accelerated approval through (1) surrogate or intermediate endpoints reasonably likely to predict long-term clinical benefit or (2) reliance upon data obtained from a meaningful number of sites. Benefits of such designation include early interactions with FDA to discuss any potential surrogate or intermediate endpoint to be used to support accelerated approval. A RMAT that is granted accelerated approval and is subject to post-approval requirements may fulfill such requirements through the submission of clinical evidence, clinical studies, patient registries, or other sources of real-world evidence, such as electronic health records; the collection of larger confirmatory data sets; or post-approval monitoring of all patients treated with such therapy prior to its approval.

Any marketing application for a product candidate submitted to the FDA for approval, including a product candidate with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and

accelerated approval. A product candidate is eligible for priority review if it has the potential to provide a significant improvement in the safety or effectiveness of the treatment, diagnosis or prevention of a serious disease or condition compared to available therapies. For original BLAs, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biological product designated for priority review in an effort to facilitate the review.

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product candidate generally provides a meaningful advantage over available therapies and demonstrates an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical trials to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Under the Food and Drug Omnibus Reform Act of 2022 ("FDORA"), the FDA is now permitted to require, as appropriate, that such trials be underway prior to approval or within a specific time period after the date of approval for a product granted accelerated approval. Sponsors are also required to send updates to the FDA every 180 days on the status of such studies, including progress toward enrollment targets, and the FDA must promptly post this information publicly. Under FDORA, the FDA has increased authority for expedited procedures to withdraw approval of a drug or indication approved under accelerated approval if, for example, the sponsor fails to conduct such studies in a timely manner and send the necessary updates to the FDA, or if a confirmatory trial fails to verify the predicted clinical benefit of the product. In addition, for products being considered for accelerated approval, the FDA generally requires, unless otherwise informed by the agency, that all advertising and promotional materials intended for dissemination or publication within 120 days of marketing approval be submitted to the agency for review during the pre-approval review period, which could adversely impact the timing of the commercial launch of the product.

Fast track designation, breakthrough therapy designation, RMAT designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a biological product candidate intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or 200,000 or more than individuals in the United States for which there is no reasonable expectation that the cost of developing and making available in the United States a product for this type of disease or condition will be recovered from sales in the United States for that product. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product candidate that has orphan drug designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same product for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity or if the holder of the orphan exclusivity cannot assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan exclusivity does not prevent the FDA from

approving a different product for the same disease or condition, or the same product for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA application fee.

A designated orphan drug may not receive orphan exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Pediatric Trials and Exclusivity

Under the Pediatric Research Equity Act ("PREA"), a BLA or supplement to a BLA must contain data to assess the safety and efficacy of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDCA requires that a sponsor who is planning to submit a marketing application for a product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan ("PSP"), within sixty days of an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from nonclinical studies, early phase clinical trials, and/or other clinical development programs. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of data or full or partial waivers. Sponsors who conduct studies of their product candidate in children are eligible for pediatric exclusivity. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which attaches to the twelve-year exclusivity period for reference biologics, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Rare Pediatric Disease Designation and Priority Review Vouchers

Under the FDCA, as amended, the FDA incentivizes the development of drugs and biologics that meet the definition of a "rare pediatric disease," defined to mean a serious or life-threatening disease in which the serious of life-threatening manifestations primarily affect individuals aged from birth to 18 years and the disease affects fewer than 200,000 individuals in the United States or affects 200,000 or more in the United States and for which there is no reasonable expectation that the cost of developing and making in the United States a drug for such disease or condition will be received from sales in the United States of such drug. The sponsor of a product candidate for a rare pediatric disease may be eligible for a voucher that can be used to obtain a priority review for a subsequent human drug or biologic application after the date of approval of the rare pediatric disease drug product, referred to as a priority review voucher ("PRV"). A sponsor may request rare pediatric disease designation from the FDA prior to the submission of its NDA or BLA. A rare pediatric disease designation does not guarantee that a sponsor will receive a PRV upon approval of its NDA or BLA. Moreover, a sponsor who chooses not to submit a rare pediatric disease designation request may nonetheless receive a PRV upon approval of their marketing application if they request such a voucher in their original marketing application and meet all of the eligibility criteria. If a PRV is received, it may be sold or transferred an unlimited number of times. Congress has extended the PRV program until September 30, 2024, with the potential for PRVs to be granted until September 30, 2026.

Post-Approval Requirements

Any products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping,

reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims or changes of the site of manufacture, are subject to prior FDA review and approval. There also are continuing user fee requirements, under which the FDA assesses an annual program fee for each product identified in an approved BLA.

The FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMPs. Biological product manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMPs, which impose certain organizational, procedural and documentation requirements with respect to manufacturing and quality assurance activities. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMPs and impose reporting requirements upon Graphite and any third-party manufacturers that Graphite may decide to use. BLA holders using contract manufacturers, laboratories or packagers are responsible for the selection and monitoring of qualified firms, and, in certain circumstances, qualified suppliers to these firms. These firms and, where applicable, their suppliers are subject to inspections by the FDA at any time, and the discovery of violative conditions, including failure to conform to cGMP, could result in enforcement actions that interrupt the operation of any such facilities or the ability to distribute products manufactured, processed or tested by them. Manufacturers and other parties involved in the drug supply chain for prescription drug products must also comply with product tracking and tracing requirements and for notifying the FDA of counterfeit, diverted, stolen and intentionally adulterated products or products that are otherwise unfit for distribution in the United States. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMPs and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of a product, complete withdrawal of the product from the market or product recalls;
- fines, warning or untitled letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing product approvals;
- product seizure or detention, or refusal of the FDA to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of biological products. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the

FDA and in accordance with the provisions of the approved label. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by Graphite and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict a manufacturer's communications on the subject of off-label use of their products.

U.S. Patent Term Restoration

Depending upon the timing, duration and specifics of the FDA approval of the use of Graphite's biological product candidates, some of Graphite's U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the approval of that application. Only one patent applicable to an approved biological product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. In addition, a patent can only be extended once and only for a single product. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, Graphite may intend to apply for restoration of patent term for one of its patents, if and as applicable, to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA.

Biosimilars and Reference Product Exclusivity

The ACA includes a subtitle called the Biologics Price Competition and Innovation Act ("BPCIA"), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-approved reference biological product. This amendment to the PHSA attempts to minimize duplicative testing. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. This does not include a supplement for the biological product or a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device, or strength, unless that change is a modification to the structure of the biological product and such modification changes its safety, purity, or potency. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves

a full BLA for the competing product containing that applicant's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products.

Foreign Regulation

In order to market any product outside of the United States, Graphite would need to comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety, and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of its products. Whether or not Graphite obtains FDA approval for a product, Graphite would need to obtain the necessary approvals by the comparable foreign regulatory authorities before Graphite can commence clinical trials or marketing of the product in foreign countries and jurisdictions. Although many of the issues discussed above with respect to the United States apply similarly in the context of the European Union, the approval process varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

Regulation and Procedures Governing Approval of Medicinal Products in Europe

Clinical Trial Approval

In the European Union, Graphite's future products also may be subject to extensive regulatory requirements. As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls.

In April 2014, the EU adopted the new Clinical Trials Regulation ("EU") No 536/2014, ("Regulation") which replaced the Clinical Trials Directive 2001/20/EC ("Directive") on January 31, 2022. The transitory provisions of the Regulation provide that, by January 31, 2025, all ongoing clinical trials must have transitioned to the new Regulation.

The new Regulation is directly applicable in all EU Member States (and so does not require national implementing legislation in each Member State), and aims at simplifying and streamlining the approval of clinical studies in the EU. The main characteristics of the new Regulation include: a streamlined application procedure via a single-entry point through the Clinical Trials Information System, ("CTIS"); a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts (Part I contains scientific and medicinal product documentation and Part II contains the national and patient-level documentation). Part I is assessed by a coordinated review by the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted ("Concerned Member States") of a draft report prepared by a Reference Member State. Part II is assessed separately by each Concerned Member State. Strict deadlines have also been established for the assessment of clinical trial applications.

Marketing Authorization

To obtain a marketing authorization for a product in the European Union, an applicant must submit a marketing authorization application, either under the centralized procedure administered by the EMA or one of the procedures administered by competent authorities in EU Member States (decentralized procedure, national procedure, or mutual recognition procedure).

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid throughout the EU, and in the additional Member States of the European Economic Area (Iceland, Liechtenstein and Norway), or EEA. Pursuant to Regulation (EC) No. 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products (gene therapy, somatic-cell therapy and tissue-engineered products) and products with a new active substance indicated for the treatment of certain diseases, including HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. The centralized procedure is optional for products containing a new active substance not yet authorized in the EU, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interests of public health.

Specifically, the grant of a marketing authorization in the EU for products based on genes, tissues or cells, such as gene therapy or somatic-cell therapy medicinal products, is governed in part by Regulation (EC) No 1394/2007 on advanced therapy medicinal products ("ATMPs"). Regulation (EC) No 1394/2007 lays down specific rules concerning the authorization, supervision, and pharmacovigilance of ATMPs. Manufacturers of ATMPs must demonstrate the quality, safety, and efficacy of their products to the EMA's Committee for Advanced Therapies, which provides an opinion on the quality, safety and efficacy of each ATMP subject to marketing authorization application which is sent for final approval to the EMA's Committee for Medicinal Products for Human Use ("CHMP"). The CHMP recommendation is then sent to the European Commission, which adopts a decision on whether to grant a marketing authorization which is binding in all Member States. Under the centralized procedure, the maximum timeframe for the evaluation of a marketing authorization application is 210 days from receipt of a valid application, excluding clock stops when additional information or written or oral explanation is to be provided by the applicant in response to questions asked by CHMP. Clock stops may extend the timeframe of evaluation of a marketing authorization application considerably beyond 210 days. Accelerated assessment may be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of major public health interest, particularly from the viewpoint of therapeutic innovation. If the CHMP accepts such a request, the timeframe of 210 days for assessment will be reduced to 150 days (excluding clock stops), but it is possible that the CHMP may revert to the standard time limit for the centralized procedure if it determines that the application is no longer appropriate to conduct an accelerated assessment.

Now that the UK (which comprises Great Britain and Northern Ireland) has left the EU, Great Britain will no longer be covered by centralized marketing authorizations (under the Northern Ireland Protocol, centralized marketing authorizations will continue to be recognized in Northern Ireland). All medicinal products with an existing centralized marketing authorization were automatically converted to Great Britain marketing authorizations on January 1, 2021. For a period of three years from January 1, 2021, the Medicines and Healthcare products Regulatory Agency ("MHRA"), the UK medicines regulator, may rely on a decision taken by the European Commission on the approval of a new marketing authorization in the centralized procedure, in order to more quickly grant a new Great Britain marketing authorization. This is known as the EC Decision Reliance Procedure. On January 24, 2023, the MHRA announced that a new international recognition framework will be put in place from January 1, 2024, which will have regard to decisions on the approval of marketing authorizations made by the EMA and certain other regulators.

European Union Data and Marketing Exclusivity

In the EU, innovative medicinal products (including both small molecules and biological medicinal products) approved on the basis of a complete and independent data package, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. The data exclusivity, if granted, prevents generic or biosimilar applicants from referencing the innovator's pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar marketing authorization in the EU, for a period of eight years from the date on which the reference product was first authorized in the EU. During the additional two-year period of market exclusivity, a generic or biosimilar marketing authorization can be submitted, and the innovator's data may be referenced, but no generic or biosimilar medicinal product can be placed on the EU market until the expiration of the market exclusivity

period. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are determined to bring a significant clinical benefit in comparison with currently approved therapies. There is no guarantee that a product will be considered by the EMA to be an innovative medicinal product, and products may not qualify for data exclusivity. Even if a product is considered to be an innovative medicinal product so that the innovator gains the prescribed period of data exclusivity, another company could nevertheless also market another version of the product if such company obtained a marketing authorization based on an application with a complete and independent data package of pharmaceutical tests, preclinical tests and clinical trials.

European Union Orphan Designation and Exclusivity

In the EU, the EMA's Committee for Orphan Medicinal Products grants orphan designation in respect of a product if its sponsor can establish that: (1) the product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (i) such condition affects no more than 5 in 10,000 persons in the EU when the application is made, or (ii) where it is unlikely that the marketing of the medicine, without the benefits derived from orphan status, would generate sufficient return in the EU to justify the necessary investment in its development; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU or, if such a method exists, the product would be of a significant benefit to those affected by that condition.

In the EU, orphan designation entitles a party to financial incentives such as reduction of fees or fee waivers, and ten years of market exclusivity is granted following marketing approval for the orphan product. This period may be reduced to six years if, at the end of the fifth year, it is established that the orphan designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. During the period of market exclusivity, a marketing authorization may only be granted to a "similar medicinal product" for the same therapeutic indication if: (i) a second applicant can establish that its product, although similar to the authorized orphan product, is safer, more effective or otherwise clinically superior; (ii) the marketing authorization holder for the authorized orphan product consents to a second orphan medicinal product application; or (iii) the marketing authorization holder for the authorized orphan product cannot supply enough orphan medicinal product. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. Orphan designation must be requested before submitting an application for marketing authorization. Orphan designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Regulatory Requirements After a Marketing Authorization has been Obtained

If an authorization for a medicinal product in the EU is obtained, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. These include:

- Compliance with the EU's stringent pharmacovigilance or safety reporting rules must be ensured. These rules can impose post-authorization studies and additional monitoring obligations.
- The manufacturing of authorized medicinal products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the applicable EU laws, regulations and guidance, including Directive 2001/83/EC, Directive 2003/94/EC, Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice. These requirements include compliance with EU cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients, including the manufacture of active pharmaceutical ingredients outside of the EU with the intention to import the active pharmaceutical ingredients into the EU.

- The marketing and promotion of authorized drugs, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the EU. Direct-to-consumer advertising of prescription medicines is prohibited across the EU.

The aforementioned EU rules are generally applicable in the EEA.

Brexit and the Regulatory Framework in the United Kingdom

The UK formally left the EU on January 31, 2020 and the EU and the UK have concluded a trade and cooperation agreement (the "TCA"), which was provisionally applicable since January 1, 2021 and has been formally applicable since May 1, 2021. The TCA includes specific provisions concerning pharmaceuticals, which include the mutual recognition of GMP, inspections of manufacturing facilities for medicinal products and GMP documents issued, but does not provide for wholesale mutual recognition of UK and EU pharmaceutical regulations. At present, Great Britain has implemented EU legislation on the marketing, promotion and sale of medicinal products through the Human Medicines Regulations 2012 (as amended) (under the Northern Ireland Protocol, the EU regulatory framework continues to apply in Northern Ireland). The regulatory regime in Great Britain therefore aligns in many ways with current EU regulations, however it is possible that these regimes will diverge more significantly in future now that Great Britain's regulatory system is independent from the EU and the TCA does not provide for mutual recognition of UK and EU pharmaceutical legislation. However, notwithstanding that there is no wholesale recognition of EU pharmaceutical legislation under the TCA, under the new framework mentioned above which will be put in place by the MHRA from January 1, 2024, the MHRA has stated that it will take into account decisions on the approval of marketing authorizations from the EMA (and certain other regulators) when considering an application for a Great Britain marketing authorization. On February 27, 2023, the UK government and the European Commission announced a political agreement in principle to replace the Northern Ireland Protocol with a new set of arrangements, known as the "Windsor Framework". This new framework fundamentally changes the existing system under the Northern Ireland Protocol, including with respect to the regulation of medicinal products in the UK. In particular, the MHRA will be responsible for approving all medicinal products destined for the UK market (Great Britain and Northern Ireland) and the EMA will no longer have any role in approving medicinal products destined for Northern Ireland. A single UK-wide marketing authorization will be granted by the MHRA for all medicinal products to be sold in the UK, enabling products to be sold in a single pack and under a single authorization throughout the UK. Once the Windsor Framework is approved by the EU-UK Joint Committee, the UK Government and the EU will enact legislative measures to enact it into law.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which Graphite or its collaborators obtain regulatory approval. In the United States and markets in other countries, sales of any products for which Graphite or its collaborators receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage, and establish adequate reimbursement levels for such drug products.

Graphite's ability to successfully commercialize its product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow Graphite to establish or maintain pricing sufficient to realize a sufficient return on its investment. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. In the United States, third-party payors include federal and state healthcare programs, government authorities, private managed care providers, private health insurers and other organizations.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from

countries where they may be sold at lower prices than in the United States. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of medical drug products and medical services, in addition to questioning their safety and efficacy. Such payors may limit coverage to specific drug products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs for a particular indication. Graphite or its collaborators may need to conduct expensive pharmaco-economic studies in order to demonstrate the medical necessity and cost-effectiveness of its products, in addition to the costs required to obtain the FDA approvals. Nonetheless, its product candidates may not be considered medically necessary or cost-effective. Moreover, the process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price of a drug product or for establishing the reimbursement rate that such a payor will pay for the drug product. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable Graphite to maintain price levels sufficient to realize an appropriate return on its investment in product development.

Different pricing and reimbursement schemes exist in other countries. In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular drug candidate to currently available therapies. Other European Union countries allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any product candidates for which Graphite or its collaborators receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and Graphite expects will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which Graphite or its collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Other U.S. Healthcare Laws and Compliance Requirements

Healthcare providers, including physicians, and third-party payors play a primary role in the recommendation and prescription of any product candidates that Graphite may develop for which Graphite obtains marketing approval. Graphite's current and future arrangements with third-party payors, healthcare providers and customers may implicate broadly applicable fraud and abuse and other healthcare laws and regulations. Restrictions under applicable federal and state healthcare laws and regulations, including certain laws and regulations applicable only if Graphite has marketed products, include the following:

- the civil False Claims Act ("FCA"), prohibits knowingly presenting or causing the presentation of a false, fictitious or fraudulent claim for payment to the U.S. government. Actions under the False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the False Claims Act can result in very significant monetary penalties, for each false claim and treble the amount of the government's damages. Manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The federal False Claims Act also

permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the federal False Claims Act and to share in any monetary recovery;

- the federal Anti-Kickback Statute prohibits, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as Medicare and Medicaid. The federal Anti-Kickback Statute has been interpreted to apply to arrangements between manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. A violation of the federal Anti-Kickback Statute can also form the basis for FCA liability;
- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which, in addition to privacy protections applicable to healthcare providers and other entities, prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH"), and its implementing regulations, including the final omnibus rule published on January 25, 2013, imposes, among other things, certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to business associates, defined as independent contractors or agents of covered entities that create, receive, maintain, transmit, or obtain, protected health information in connection with providing a service for or on behalf of a covered entity, and their covered subcontractors. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions;
- the FDCA, which among other things, strictly regulates drug marketing, prohibits manufacturers from marketing such products for off-label use and regulates the distribution of samples;
- federal laws that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain discounts or rebates to government authorities or private entities, often as a condition of reimbursement under government healthcare programs;
- federal transparency laws, including the federal Physician Payment Sunshine Act created under the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "ACA"), and its implementing regulations, which requires manufacturers of certain drugs, devices, medical supplies, and biologics, among others, to track and disclose payments under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) and other transfers of value they make to U.S. physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other licensed health care practitioners and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. This information is subsequently made publicly available in a searchable format on a Centers for Medicare & Medicaid Services ("CMS"), website. Failure to disclose required information may result in civil monetary penalties for all payments, transfers of value or ownership or investment interests that are not timely, accurately and completely reported in an annual submission. Certain states also mandate implementation of compliance programs, impose restrictions on drug manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians and/or other healthcare providers;
- federal government price reporting laws, which require Graphite to calculate and report complex pricing metrics in an accurate and timely manner to government programs;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- analogous state and foreign laws and regulations, such as state anti-kickback, anti-bribery and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers.

Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, track and report gifts, compensation and other remuneration made to physicians and other healthcare providers, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of its activities are potentially subject to federal and state consumer protection and unfair competition laws.

The provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order, or use of medicinal products is prohibited in the European Union. The provision of benefits or advantages to also induce or reward improper performance generally is sometimes governed by the national anti-bribery laws of European Union Member States, and the Bribery Act 2010 in the United Kingdom. Infringement of these laws could result in substantial fines and imprisonment. EU Directive 2001/83/EC, which is the EU Directive governing medicinal products for human use, further provides that, where medicinal products are being promoted to persons qualified to prescribe or supply them, no gifts, pecuniary advantages or benefits in kind may be supplied, offered or promised to such persons unless they are inexpensive and relevant to the practice of medicine or pharmacy. This provision has been transposed into the Human Medicines Regulations 2012 and so remains applicable in the United Kingdom despite its departure from the EU.

Payments made to physicians in certain European Union Member States must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization, and/or the regulatory authorities of the individual European Union Member States. These requirements are provided in the national laws, industry codes, or professional codes of conduct applicable in the European Union Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been and continue to be ongoing efforts to implement legislative and regulatory changes regarding the healthcare system. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products and services, implementing reductions in Medicare and other healthcare funding and applying new payment methodologies.

Within the United States, the federal government and individual states have aggressively pursued healthcare reform, as evidenced by the passing of the ACA and the ongoing efforts to modify or repeal that legislation. The ACA substantially changed the way healthcare is financed by both governmental and private insurers and contains a number of provisions that affect coverage and reimbursement of drug products and/or that could potentially reduce the demand for pharmaceutical products such as increasing drug rebates under state Medicaid programs for brand name prescription drugs and extending those rebates to Medicaid managed care and assessing a fee on manufacturers and importers of brand name prescription drugs reimbursed under certain government programs, including Medicare and Medicaid. Modifications have been implemented under the previous presidential administration and additional modifications or repeal may occur.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted, for example:

- The Budget Control Act of 2011 and subsequence legislation, among other things, created measures for spending reductions by Congress that include aggregate reductions of Medicare payments to providers of 2% per fiscal year, which remain in effect through 2031. Due to the Statutory Pay-As-You-Go Act of 2010, estimated budget deficit increases resulting from the American Rescue Plan Act of 2021, and subsequent legislation, Medicare payments to providers will be further reduced starting in 2025 absent further legislation.
- The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. The Bipartisan Budget Act ("BBA"), also amended the ACA, effective January 1, 2019, by increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and closing the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole."
- On April 13, 2017, CMS published a final rule that gives states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces.
- On May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.
- On May 23, 2019, CMS published a final rule to allow Medicare Advantage Plans the option of using step therapy for Part B drugs beginning January 1, 2020.

Furthermore, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several congressional inquiries and proposed legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient assistance programs and reform government program reimbursement methodologies for drug products. President Biden has issued multiple executive orders that have sought to reduce prescription drug costs. In addition, in February 2023, HHS issued a proposal in response to an October 2022 executive order from President Biden that includes a proposed prescription drug pricing model that will test whether targeted Medicare payment adjustments will sufficiently incentivize manufacturers to complete confirmatory trials for drugs approved through FDA's accelerated approval pathway. Although a number of these and other proposed measures may require authorization through additional legislation to become effective, and the Biden administration may reverse or otherwise change these measures, both the Biden administration and Congress have indicated that they will continue to seek new legislative measures to control drug costs.

The Inflation Reduction Act of 2022, or IRA includes several provisions that may impact its business to varying degrees, including provisions that reduce the out-of-pocket spending cap for Medicare Part D beneficiaries from $7,050 to $2,000 starting in 2025, thereby effectively eliminating the coverage gap; impose new manufacturer financial liability on certain drugs under Medicare Part D, allow the U.S. government to negotiate Medicare Part B and Part D price caps for certain high-cost drugs and biologics without generic or biosimilar competition; require companies to pay rebates to Medicare for certain drug prices that increase faster than inflation; and delay until January 1, 2032 the implementation of the HSS rebate rule that would have limited the fees that pharmacy benefit managers can charge. Further, under the IRA, orphan drugs are exempted from the Medicare drug price negotiation

program, but only if they have one orphan designation and for which the only approved indication is for that disease or condition. If a product receives multiple orphan designations or has multiple approved indications, it may not qualify for the orphan drug exemption. The implementation of the IRA is currently subject to ongoing litigation challenging the constitutionality of the IRA's Medicare drug price negotiation program. The effects of the IRA on its business and the healthcare industry in general is not yet known.

At the state level, legislatures have also been increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Employees and Human Capital Resources

As of February 1, 2024, Graphite had six full-time employees. None of its employees are represented by labor unions or covered by collective bargaining agreements. In February 2023, Graphite announced a restructuring plan that resulted in an approximately 71.2% reduction in its workforce.

Graphite considers its relationship with its employees to be good. Graphite's human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating its existing and additional employees. The principal purposes of its equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards.

Corporate History and Information

Graphite was incorporated in Ontario, Canada on June 1, 2017, as Longbow Therapeutics Inc. and were reincorporated in the State of Delaware in October 2019. In February 2020, Graphite changed its name to Integral Medicines, Inc. and in August 2020, Graphite changed its name to Graphite Bio, Inc. Research and development of its initial technology ceased at the end of 2018 and Graphite did not have any significant operations or any research and development activities in 2019. Graphite began its current research and development activities and operations in 2020.

Graphite's principal executive office is located at 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080, and its telephone number is (650) 484-0886. Graphite's website address is https://graphitebio.com/. Graphite does not incorporate the information on or accessible through its website into this proxy statement/prospectus, and you should not consider any information on, or that can be accessed through, its website as part of this proxy statement/prospectus. Graphite has included its website address in this proxy statement/prospectus solely as an inactive textual reference.

Graphite uses various trademarks and trade names in its business, including without limitation its corporate name and logo. All other trademarks or trade names referred to in this proxy statement/prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this proxy statement/prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Implications of Being an Emerging Growth Company and Smaller Reporting Company

Graphite is an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012. Graphite will remain an emerging growth company until the earlier of: (i) the last day of the fiscal year (a) following the fifth anniversary of the completion of the IPO, (b) in which it has total annual gross revenue of at least $1.235 billion, or (c) in which it is deemed to be a large accelerated filer, as defined in Rule 12b-2 under the Securities and Exchange Act of 1934, as amended (the "Exchange Act") and (ii) the date on which it has issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Graphite is also a "smaller reporting company" as defined in the Exchange Act. Graphite may continue to be a smaller reporting company even after it is no longer an emerging growth company. Graphite may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that its voting and non-voting common stock held by non-affiliates is more than $250 million measured on the last business day of its second fiscal quarter, or its annual revenues are more than $100 million during the most recently completed fiscal year and its voting and non-voting common stock held by non-affiliates is more than $700 million measured on the last business day of its second fiscal quarter.

Litigation

As of February 5, 2024, one complaint has been filed by a purported Graphite stockholder against Graphite and the Graphite board of directors in connection with the proposed merger. Specifically, on February 1, 2024, a purported stockholder filed a complaint, captioned Chew v. Graphite Bio, Inc., et al., No. 3:24-cv-00613 (N.D.Cal.) (the "Complaint"), in federal court in California against Graphite and its board of directors. The Complaint alleges that the defendants filed or caused to be filed a materially incomplete and misleading preliminary registration statement with the SEC and asserts claims under Sections 14(a) and 20(a) of the Exchange Act. The Complaint seeks an order enjoining the proposed merger, or in the event that the proposed merger is consummated, an order rescinding the merger or awarding rescissory damages, as well as costs, including attorneys' and experts' fees. In addition, Graphite and the Graphite board of directors have received four additional demands from purported Graphite stockholders seeking additional disclosures in the registration statement (collectively, the "Demands"). Graphite cannot predict the outcome of the Complaint or the Demands. Graphite believes that the allegations and claims asserted in the Complaint and the Demands are without merit and intends to defend against them vigorously. Additional lawsuits and demand letters arising out of the merger may also be filed or received in the future, though Graphite will not provide additional disclosures unless those new complaints or letters contain material differences from those received to date.

LENZ'S BUSINESS

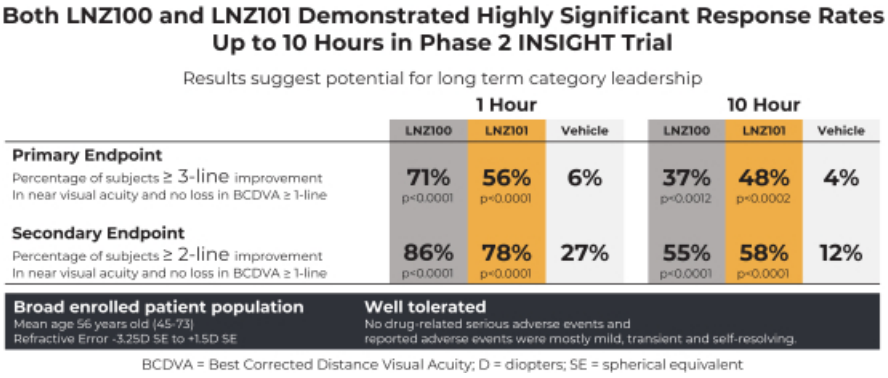
Overview

LENZ Therapeutics, Inc. is a late-stage biopharmaceutical company focused on developing and commercializing innovative therapies to improve vision. LENZ's initial focus is the treatment of presbyopia, the inevitable loss of near vision that impacts the daily lives of nearly all people over 45. In the United States, the estimated addressable population who suffer from this condition, known as presbyopes, is 128 million, almost four times the number of individuals suffering from dry eye disease and three times the number of individuals suffering from childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. LENZ believes that a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday, without the need for reading glasses, will be a highly attractive commercial product with an estimated U.S. market opportunity in excess of $3 billion. It is LENZ's goal to develop and commercialize such a product, and LENZ has assembled an executive team with extensive clinical and commercial experience to execute this goal and become the category leader.

LENZ's product candidates LNZ100 and LNZ101 are preservative-free, single-use, once-daily eye drops containing aceclidine and aceclidine plus brimonidine, respectively. LENZ believes its product candidates are differentiated based on rapid onset, degree and duration of near vision improvement, as well as their ability to be used across the full age range of presbyopes, from their mid-40s to well into their mid-70s, as well as the broadest refractive range. Aceclidine's pupil-selective mechanism of action was demonstrated in LENZ's clinical trials where near vision improved while avoiding blurry distance vision. LENZ's product candidates were well-tolerated in clinical trials, and their active ingredients have favorable tolerability profiles that have been well-established empirically. Its product candidates have patent protection until 2039, at a minimum, due to a robust intellectual property portfolio underpinned by issued patents. If one of its product candidates is approved, LENZ believes that it could be the first aceclidine-based product approved by the U.S. Food and Drug Administration ("FDA") and would then be eligible for five years of new chemical entity ("NCE") exclusivity in the United States.

In LENZ's Phase 2 trial (NCT05294328, the "INSIGHT", or "Phase 2" trial), both LNZ100 and LNZ101 achieved the primary endpoint of three-lines or greater improvement in near visual acuity without losing one or more lines in Best Corrected Distance Visual Acuity ("BCDVA") at one-hour post-treatment, with a response rate of 71% ($p<0.0001$) and 56% ($p<0.0001$), respectively, compared to 6% for vehicle, with three-lines or greater improvement being observed as early as 30 minutes post-treatment, the earliest timepoint measured, and lasting up to 10 hours, the last timepoint measured. BCDVA in this context refers to the best possible distance vision that an individual's eye can see using corrective lenses. For more details, see "*INSIGHT: Phase 2 Clinical Trial — Trial Design*."

Based on the positive results in its Phase 2 trial, LENZ is currently conducting three Phase 3 clinical trials (the "CLARITY" or "Phase 3" trials) with top-line results expected to be announced in the second quarter of 2024. Subject to successful completion of these trials, LENZ plans to submit a New Drug Application ("NDA") to the FDA for one or both of its product candidates in mid-2024. If approval is granted, LENZ will rigorously evaluate the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback to select and commercialize the product LENZ believes will have the greatest commercial potential, with a launch target date in mid-2025.



It is estimated that there are 1.8 billion presbyopes globally and 128 million presbyopes in the United States. As people age, the crystalline lens in their eyes gradually hardens, resulting in a loss of lens elasticity that reduces the ability of the lens to increase its curvature and refractive power to focus incoming light for near vision onto the retina, known as accommodation. Although the progression of presbyopia is gradual, presbyopes often experience an abrupt change in their daily life as the symptoms become more pronounced starting in their mid-40s, when reading glasses or other corrective aids are suddenly necessary to read text or conduct close-up work. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an eye care professional ("ECP"), with prescription reading or bifocal glasses or multifocal contact lenses. Currently, the only approved pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand Vuity.

Based on data collected in a third-party study commissioned by LENZ in early 2023 that is further described in the section "*Market Opportunity*," LENZ found that presbyopes have high willingness to use a daily prescription eye drop that improves their near vision throughout the full workday. LENZ expects that there will be a wide range of presbyopes that will be interested in using the eye drops at least four times a week. The large initial demand seen for Vuity during its launch in late 2021 and early 2022 corroborates the market demand for a pharmaceutical option for the treatment of presbyopia. However, despite a promising initial launch, Vuity's user uptake has been limited by reportedly lower-than-expected efficacy and duration of effect across users. Additionally, Vuity use is associated with some side effects, including retinal tears and detachments, induced by the stimulation of the ciliary muscle. These limitations on efficacy and safety subsequently resulted in lower than anticipated prescription refill rates and a label amendment reflecting the risk of retinal tears and detachment specifically associated with Vuity. LENZ believes that its once-daily eye drop, if approved, could become the leading brand for presbyopes, by improving near vision throughout the full workday.

LENZ's product candidates LNZ100 and LNZ101 are formulated with aceclidine, a miotic, and designed to achieve optimal pupil diameter without impacting distance vision, a key limitation of other miotics. Miotics are compounds that cause pupil constriction, or miosis, creating a pinhole effect that enables better focus of incoming light from near objects onto the retina. Research has shown that a pupil diameter below two millimeters (2 mm) is optimal for presbyopia treatment and results in clinically meaningful improvement in near vision. Unlike other miotics such as pilocarpine and carbachol, aceclidine's mechanism of action is pupil-selective, meaning it can activate the iris sphincter muscle and cause miosis of the pupil to a diameter below 2 mm without overstimulating the ciliary muscles that can cause a myopic shift and impair distance vision. As a result, aceclidine does not require any remaining accommodation to improve near vision, broadening its benefits to older presbyopes whose lens has lost this capacity. Therefore, LENZ expects that users may be able to benefit from treatment even as they age from mid-40s to well into their mid-70s and across a broader range of refractive errors, as demonstrated in clinical testing to date.

LNZ101 contains the active ingredient brimonidine in addition to aceclidine. Brimonidine is an alpha 2 ("α2") adrenergic receptor agonist that has also been used for lowering intraocular pressure as a treatment for glaucoma since the 1990s. Brimonidine causes vasoconstriction, prolonging the presence of aceclidine on the ocular surface and increasing aceclidine's penetration into the anterior chamber. As a result, brimonidine extends the duration of the miotic effect of aceclidine.

While aceclidine is new to the United States, it has a long-established history outside the United States having been approved in Europe since the 1970s for the treatment of glaucoma, and marketed by Merck under the brand Glaucostat, at higher concentrations than in LENZ's product candidates and up to four times a day. Similarly, brimonidine also has a long-established history of use. It is the active ingredient in Alphagan and Alphagan P, products initially marketed by Allergan (now AbbVie) for the treatment of glaucoma, in each, case at higher concentrations than in LENZ's product candidates, and is also used in Lumify ("OTC"), invented by the founders of LENZ and marketed by Bausch & Lomb. Given the known favorable tolerability profile of both active ingredients used for decades, and the unique mechanism of action of aceclidine, LENZ believes LNZ100 and LNZ101 have the potential to treat the broadest population of presbyopes and become the category leader.

In the INSIGHT trial, both product candidates demonstrated rapid onset with 73% and 62% three-lines or greater improvement in near visual acuity within 30 min for LNZ100 and LNZ101, respectively, compared to 8% for vehicle, and sustained the statistically significant three-lines or greater improvement in near visual acuity over an extended duration of 10 hours post-treatment, the last measured timepoint. Both LNZ100 and LNZ101 were well-tolerated with no serious drug-related adverse events.

In December 2022, LENZ initiated its three Phase 3 multi-center, double-masked, randomized, active and vehicle-controlled, U.S.-based efficacy and safety trials for LNZ100 and LNZ101, for which it expects to announce top-line results in the second quarter of 2024. The Phase 3 study consists of two six-week efficacy trials, CLARITY-1 and CLARITY-2, and a six-month safety trial, CLARITY-3. The primary efficacy endpoints and the study population for the CLARITY trials are similar to that of the INSIGHT trial, enrolling participants in the same age range from 45 to 75 years and with a refractive range of -4.0 diopters ("D") spherical equivalent ("SE") to +1.0D SE. As with the INSIGHT trial, the CLARITY trials will also permit enrollment of users who had previously undergone prior vision correction, such as LASIK, or cataract extraction with lens implant. Subject to successful completion of the CLARITY trials, LENZ plans to submit an NDA for at least one of its product candidates to the FDA in mid-2024. If approval is granted, LENZ will rigorously evaluate the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback to select and commercialize the product LENZ believes will have the greatest commercial potential, with a launch target date in mid-2025.

Given LENZ's goal to develop and commercialize the leading, once-daily eye drop for presbyopia that can effectively and safely improve near vision throughout the full workday, LENZ continues to build a robust commercial strategy in the United States to be launch-ready upon expected timing of FDA approval. LENZ retains the flexibility to not only seek commercialization of its product candidates, but to also remain opportunistic in developing, in-licensing or partnering other products or product candidates to further leverage its commercial infrastructure to drive growth and operating leverage. Its product candidates have patent protection until 2039, at a minimum, due to a robust intellectual property portfolio underpinned by issued patents. If one of its product candidates is approved, LENZ believes that it could be the first FDA-approved aceclidine-based product and would then be eligible for five years of NCE exclusivity in the United States. As of November 28, 2023, LENZ has at least 18 issued U.S. patents, at least 21 issued patents outside the United States and over 63 pending applications globally.

To execute its vision, LENZ has assembled a team with extensive experience building successful life science and consumer product companies. Its team has helped launch and commercialize over a dozen ophthalmic products and therapies, including Acuvue, Alphagan P, Combigan, Dailies AquaComfort Plus, Durysta, Latisse, Lumigan, Pred Forte, Refresh, Restasis, Truetear, and Vuity, as well as major consumer-focused brands such as Botox, Herbalife and Ray-Ban. Members of its management team have held senior positions at Alcon, Allergan, Alvotech, Avanir, Bausch + Lomb, Herbalife, Hospira, Johnson & Johnson, Pfenex, Pfizer, VISX and others. LENZ also has engaged a strong team of medical advisors across the ophthalmology and optometry fields. LENZ's team is further supported by a strong group of investors that share its commitment to helping the millions of people experiencing symptoms of presbyopia in the United States and globally.

LENZ Strategy

LENZ is a late-stage biopharmaceutical company focused on developing and commercializing innovative therapies to improve vision. Its product candidates are the only pupil-selective miotics under development for presbyopia. It is LENZ's goal to develop and commercialize the leading, once-daily eye drop for presbyopia that can effectively and safely improve near vision throughout the full workday.

LENZ intends to achieve this goal by pursuing the following key strategic objectives:

- **Capitalize on the unique characteristics of aceclidine through its product candidates**. A key part of LENZ's strategy was the selection and development of aceclidine as a miotic agent for the treatment of presbyopia. As the only known pupil-selective miotic, aceclidine has a unique mechanism of action that LENZ believes should allow for development as a category leading eye drop for presbyopia.

LENZ has since demonstrated its ability to enable rapid onset, degree and duration of near vision improvement with minimal risk of impact to distance vision in multiple clinical trials. Furthermore, LENZ believes that aceclidine can address both a wider age range of presbyopes from mid-40s to well into their mid-70s, as well as broader refractive range, relative to currently available eye drops.

- **Rapidly advance its product candidates through clinical development.** To rapidly advance clinical development of its product candidates, LENZ is concurrently evaluating the efficacy and safety of both LNZ100 and LNZ101 across its Phase 3 trials. LENZ's multi-pronged approach to expedite patient recruitment, site selection and training has substantially accelerated enrollment. As of November 28, 2023, CLARITY-1 and CLARITY-3 are fully enrolled, and CLARITY-2 is 97% enrolled. LENZ plans to continue conducting hands-on engagement and maintain in-person presence at all trial sites to ensure timely clinical trial execution and high quality data collection, and enable reporting top-line data in the second quarter of 2024.
- **Pursue approval and commercialization of the most promising product candidate.** While LENZ plans to submit NDAs for one or both of its product candidates, it intends to commercialize a single product candidate, if approved. LENZ's decision will be informed by the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback. If the product candidates are approved by FDA, LENZ's objective is to commercialize the product that will most effectively meet the needs of the widest range of presbyopes and best create loyalty and value based on an "all eyes, all day" brand mission.
- **Pursue its focused commercial strategy across U.S. ECPs and presbyopes.** LENZ is focused on targeting and partnering with the estimated 15,000 ECPs who prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022 to enable efficient commercialization and rapid adoption of its product. It is currently educating ECPs on the importance of pupil-selective miotics that have a clinical profile that reduces pupil diameter below 2 mm without overstimulating the ciliary muscles. If approved, LENZ plans to communicate the efficacy profile of the approved product and highlight the value proposition of an alternative treatment option for presbyopia for ECPs. In parallel, its commercial team will deploy a cost-effective, highly targeted and digitally-focused consumer strategy to identify, target and build loyalty among presbyopes in the United States. LENZ expects to commercialize through the self-pay healthcare market (without third-party reimbursement) which is strategically advantageous in the United States and enables immediate patient access and volume-based pricing strategies.
- **Continue to build an experienced commercial team with the capabilities of a leading consumer focused company.** LENZ has built a leadership team with extensive experience across successful life science and consumer product companies and who have launched and commercialized over a dozen ophthalmic products and therapies and well-known consumer-focused brands. Its leadership team is complemented by a team of leading medical advisors across the ophthalmology and optometry fields. To ensure immediate commercialization upon the potential approval of its lead product candidate, LENZ is timing the expansion of its existing commercial capabilities and the development of a sales organization of 100 to 150 individuals to coincide with the expected timing of any such approval.
- **Continue to strengthen its intellectual property portfolio**. LENZ has developed and continues to expand a strong portfolio of intellectual property for the treatment of presbyopia with aceclidine-based eye drops. Its product candidates have patent protection until 2039, at a minimum, due to a robust intellectual property portfolio underpinned by issued patents. If one of its product candidates is approved, LENZ believes that it could be the first FDA-approved aceclidine-based product and would then be eligible for five years of NCE exclusivity in the United States. LENZ plans to actively seek to obtain, where appropriate, the broadest intellectual property protection possible for its product candidates by filing for additional patents or other applicable intellectual property protection covering new or enhanced proprietary technology, including new methods of use, formulations and dosing regimens. LENZ also relies on regulatory frameworks, trademarks, trade secrets, know-how, and continuing technological innovation and may consider in-licensing opportunities to develop and maintain its proprietary position.

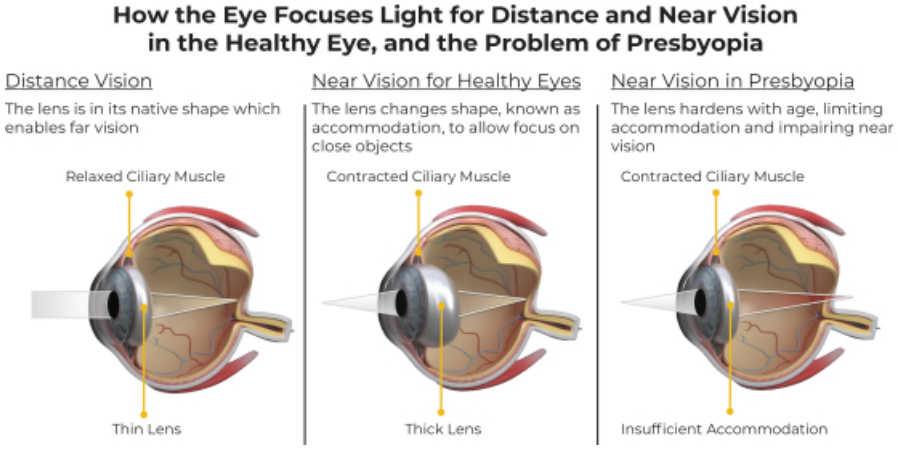
- **Opportunistically evaluate strategic and commercial opportunities to maximize the value of its product candidates**. LENZ is focused on commercializing in the United States on its own. In addition, it has entered into a license and collaboration agreement with Ji Xing to develop product candidates in Greater China and is developing regulatory strategies and intends to opportunistically seek partnerships for Europe, Canada and other markets. See the section of this proxy statement/prospectus titled "*LENZ's Business—License and Collaboration Agreement with Ji Xing Pharmaceuticals Hong Kong Limited.*" LENZ believes its presbyopia program, if approved and is successful, can serve as cornerstone for building a suite of ophthalmology biopharmaceuticals. As a result, LENZ may acquire other products or product candidates that it believes can make a substantial impact on vision and yield high user satisfaction. LENZ may seek to maximize the commercial infrastructure and relationships with ECPs that it is currently building for its presbyopia program, to potentially offer a broad portfolio of ophthalmology biopharmaceuticals to its users to drive growth and operating leverage.

Presbyopia

Background

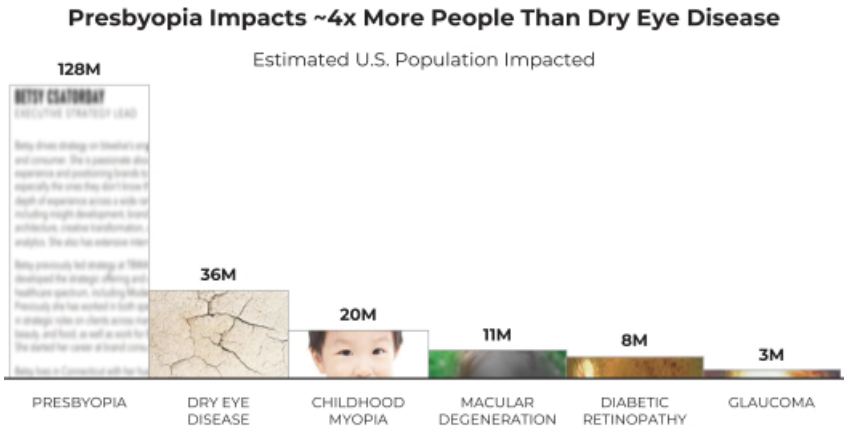
Presbyopia is the inevitable loss of near vision associated with aging. It impacts the daily lives of nearly all people over 45. As people age, the crystalline lens in their eyes gradually hardens and becomes less able to change shape. This loss of elasticity of the lens reduces the ability of the lens to focus incoming light from near objects onto the retina. Adults over age 50 lose on average 1.5 lines of near vision every six years. Although the progression of presbyopia is gradual, presbyopes often experience an abrupt change in their daily life as the symptoms become more pronounced starting in their mid-40s, when reading glasses or other corrective aids are suddenly necessary to read text or conduct close-up work. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. Currently, the only approved pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand Vuity.

As illustrated in the figure below, contraction of the ciliary muscle allows the flexible lens in a healthy eye (center panel) to increase its curvature and refractive power and focus incoming light for near vision onto the retina in a process known as accommodation. As the lens hardens with age, the presbyopic lens (right panel) loses its flexibility and ability to accommodate and, despite contraction of the ciliary muscles, the incoming light for near vision no longer focus on the surface of the retina, resulting in the blurry near vision.



Market Opportunity

Presbyopia impacts an estimated 1.8 billion people globally and 128 million people in the United States, which makes it the most prevalent ophthalmology indication, outside latent refractive errors. On an addressable population basis, presbyopia is almost four times greater than dry eye disease and three times greater than childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. Furthermore, the market opportunity for presbyopia is growing due to the aging of the general population. As people continue working and stay active longer, they will require effective treatment for presbyopia for near vision acuity in their daily lives.

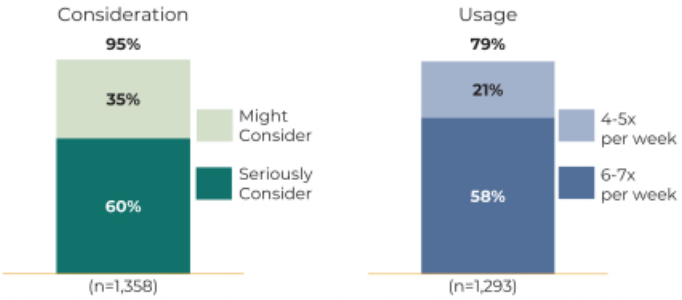


Presbyopia is a consumer driven and cash pay market that requires intense focus on the needs and desires of presbyopes. LENZ believes that the likely demand for a pharmaceutical option is driven by multiple factors, most notably presbyopes seeking to have a functional visual benefit in their day-to-day life, as well as those that want the cosmetic benefit of not requiring reading glasses. From a functional and cosmetic perspective, LENZ sees many similarities to the market dynamics between contact lenses and glasses. The contact lens market has grown to approximately $17 billion globally and approximately $6 billion in the United States in 2022. Contact lens users tend to have strong brand loyalty and the market has shown they are willing to spend out of pocket as an alternative to glasses for a variety of factors, including convenience, a more natural field of vision, enabling an active lifestyle and the ability to look younger. Similarly, over 10 million individuals have elected to complete laser vision correction, such as LASIK, which demonstrates a willingness to undergo elective surgical procedures to improve vision. Additionally, global sales of Botox injections for non-therapeutic applications, such as for cosmetic purposes, were $2.6 billion in 2022, demonstrating a high willingness to pay out of pocket for differentiated pharmaceutical brands. Currently, as people begin to develop presbyopia, they often have to stop using contact lenses, which seldom allow for simultaneous effective distance and near vision correction. A prescription eye drop that can be used in combination with distance correcting lenses can allow patients to stay in their contact lenses longer.

LENZ expects that there will be a wide range of presbyopes that will be interested in using the eye drops at least four times a week as well as a smaller group that will use them on a more episodic basis. In early 2023, it commissioned a third party consultant to conduct market research study of at least 1,000 presbyopes in the United States, ranging from ages 45 to 74, through a 15 minute online survey. The third-party consultant contacted and screened individuals who self-identified to be open to online surveys to ensure the participants satisfied the pre-specified age and near vision acuity requirements and that the group of respondents were balanced in gender and household income. Of the individuals screened, 1,358 individuals were qualified and completed the survey, and approximately 95% indicated they would “consider” using a once-daily prescription

eye drop for up to 10 hours of near vision improvement, including 60% who indicated they would "seriously consider" using such eye drop. Of the respondents who also indicated that they would either "seriously consider" or "might consider" such eye drops, 79% indicated they would use such eye drops at least four times a week, including 58% who indicated they would use such eye drop six to seven times a week.

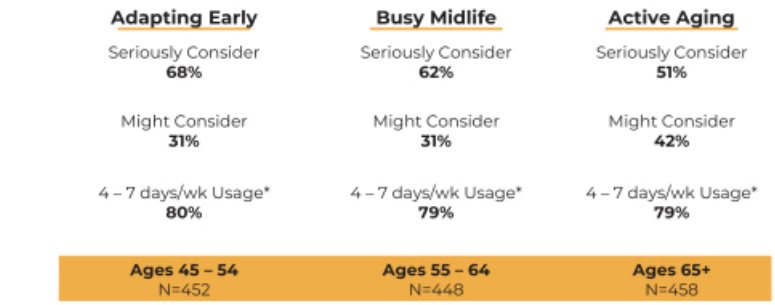
95% of Presbyopes Would "Consider" Using Once-Daily Eye Drops, of which 79% Would Use ≥4 Days per Week



Results based on a third-party market research study of U.S. presbyopes commissioned by LENZ

Furthermore, presbyopes indicated potential demand across multiple age cohorts across the following stages, including those adapting early (ages 45 to 54), busy midlife (ages 55 to 64) and active aging (ages 65+). 68% of respondents ages 45 to 54 (n=452) would "seriously consider" and another 31% "might consider" such eye drop, of which 80% (of those who would consider such eye drops) would use such eye drop at least four times a week. For respondents ages 55 to 64 (n=448), 62% would "seriously consider" and another 31% "might consider" such eye drop, of which 79% would use such eye drop at least four times a week, and for respondents ages 65 to 74 (n=458), 51% would "seriously consider" and another 42% "might consider" such eye drop, of which 79% would use such eye drop at least four times a week.

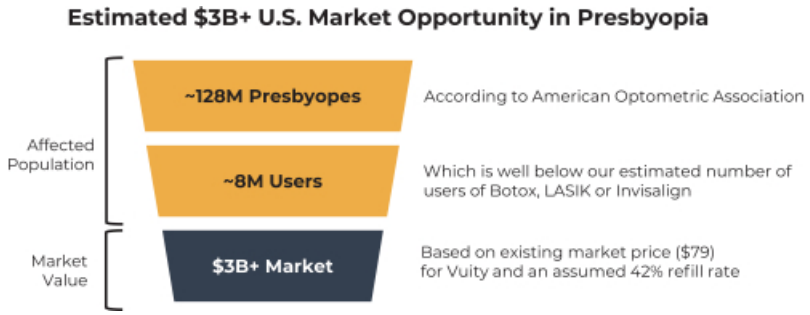
Promise of a Once-Daily Eye Drop Solution Welcomed by All Age Groups



Results based on a third-party market research study of U.S. presbyopes commissioned by LENZ (n=1,358 Presbyopes)
* percent of those who "would seriously" or "might" consider (n=1,293)

There is high demand for prescription eye drop-based treatments. In 2022 alone, more than 120,000 unique users paid out-of-pocket for a prescription for Vuity, the first miotic-based eye drop approved by the FDA in late 2021. Furthermore, the market opportunity for presbyopia is growing due to the aging of the general population and as people continue working and stay active longer they will require effective treatment for presbyopia for near vision acuity in their daily lives.

Assuming a 6% adoption rate of the addressable presbyope patient population in the United States, LENZ estimates there are eight million potential users in the United States for LNZ100 or LNZ101, if approved and marketed, well below its estimate of the number of users of other out-of-pocket products such as LASIK. Using existing market price for Vuity of $79 per prescription and assuming a 42% refill rate (or five refills in a twelve-month period), LENZ estimates a U.S. market opportunity in excess of $3 billion.



Approaches to Manage or Treat Presbyopia and Their Limitations

Currently, the primary options available for the management of presbyopia are limited to reading glasses or multi-focal glasses and contact lenses. The only currently FDA-approved pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand Vuity.

Glasses and Contact Lenses

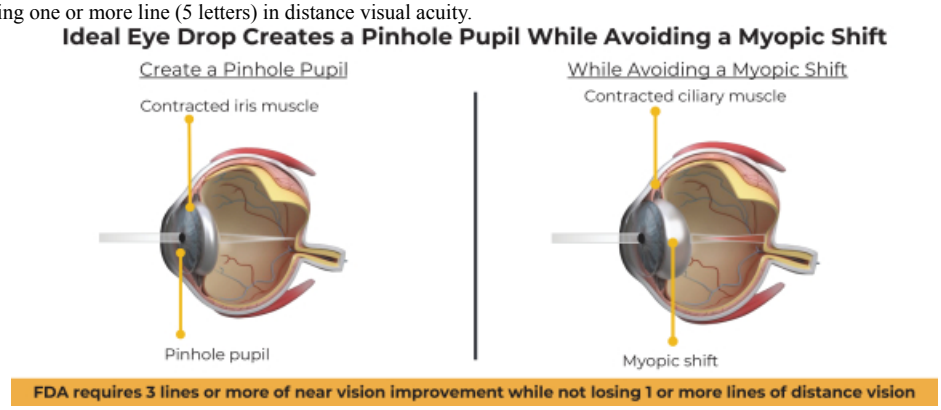
Over-the-counter or prescription reading glasses ("readers"), prescription bifocal glasses and lenses ("bifocals"), graduated glasses ("transitions"), and multifocal contact lenses are commonly used to correct for presbyopia by focusing near objects on the retina. The additional refractive power that these types of corrective lenses offer can also be combined with other vision corrections in the same prescription lenses. However, users often report dissatisfaction with the inconvenience caused by having to wear and carry glasses or insert and remove contact lenses. There are also undesirable cultural connotations associated with the use of glasses, especially reading glasses, as they can be associated with aging. Additionally, these products require a trade-off between near vision and distance vision, either removing the readers, or looking at different areas of the bifocals.

Eye Drops

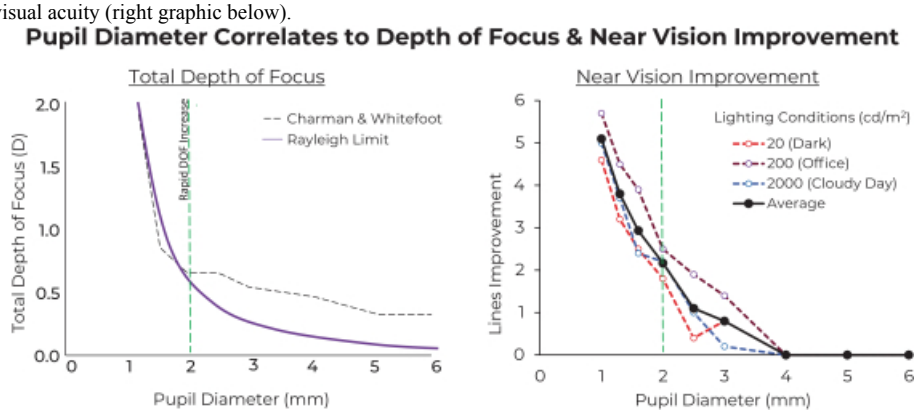
Eye drops can be an attractive method of treatment for presbyopia, especially when they only need to be administered once daily and effectively improve near vision throughout the full workday. Such an option can obviate the need to carry and wear reading glasses.

Miotics are pharmacological agents that are being developed and commercialized for the treatment of presbyopia. Miotic agents treat presbyopia by creating a pinhole effect to increase the depth of focus and thus improve the ability to see up-close. The pinhole effect is based on an optical effect whereby the depth of focus is inversely correlated with the size of the opening that light travels through. When light passes through a small pinhole or pupil, the rays that hit the outer areas of the eye and would need the most refraction to be focused on one point of the retina are blocked, leaving only the center rays which require minimal refraction to land on the retina to form a clear image. In presbyopes who have minimal accommodation or refraction ability left in their lens, this pinhole effect improves their ability to clearly see objects that are up-close. Because some miotics are historically known to negatively impact distance vision caused by a potential myopic shift associated with stimulation of the ciliary muscle, the FDA has indicated that the clinical endpoint for the approval of eye drops

for the treatment of presbyopia is showing three-lines or greater (15 letters) of improvement in near visual acuity as a result of the reduction of the pupil diameter without losing one or more line (5 letters) in distance visual acuity.



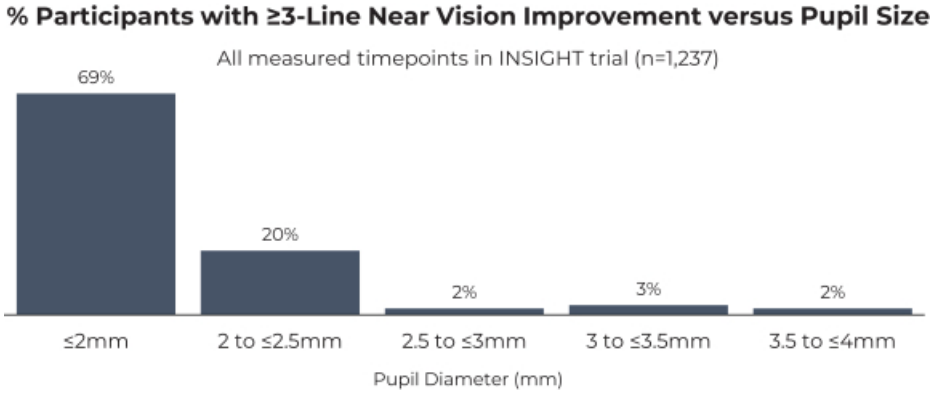
Independent, peer-reviewed, academic studies conducted by third parties and summarized by W. Neil Charman in a published editorial[1] have shown that pupil diameter is highly correlated with the depth of focus and that reducing pupil diameters below 2 mm is correlated with a dramatic increase in depth of focus (left graphic below). Similarly, in another independent, peer-reviewed, academic study[2] of near vision improvement conducted by a third party across a variety of lighting conditions, pupil diameters below 2 mm were correlated with two- to five-lines or greater improvement in near visual acuity (right graphic below).



[1] Charman, W.N. (2019), Pinholes and presbyopia: solution or sideshow?. *Ophthalmic Physiol Opt*, 39: 1-10; Ciuffreda, K.J., Rosenfield, M., Mordi, J., Chen, HW. (2000). Accommodation, age and presbyopia. In: Franzén, O., Richter, H., Stark, L. (eds) *Accommodation and Vergence Mechanisms in the Visual System*. Birkhäuser, Basel.

[2] Xu, R, Gil, D, Dibas, M, Hare, W, and Bradley, A, The Effect of Light Level and Small Pupils on Presbyopic Reading Performance. *Investigative Ophthalmology & Visual Science* October 2016, Vol.57, 5656-5664.

Furthermore, LENZ demonstrated the potential clinical benefits of aceclidine in its two product candidates, LNZ100 and LNZ101, in the INSIGHT trial, as further detailed in "*INSIGHT: Phase 2 Clinical Trial – Trial Results*" below. LENZ observed the same correlation between pupil diameter and achievement of three-lines or greater improvement in near visual acuity without losing one or more lines in BCDVA with the use of LNZ100 or LNZ101. If a participant's pupil diameter was below 2 mm at a given timepoint, they had a 69% chance of three-lines or greater improvement in near visual acuity, whereas only 20% of participants (including users who received placebo/vehicle) whose pupil diameters were between 2 mm and 2.5 mm demonstrated three-lines or greater improvement in near visual acuity. Pupil diameter greater than 2.5 mm did not lead to any meaningful improvement in near vision.

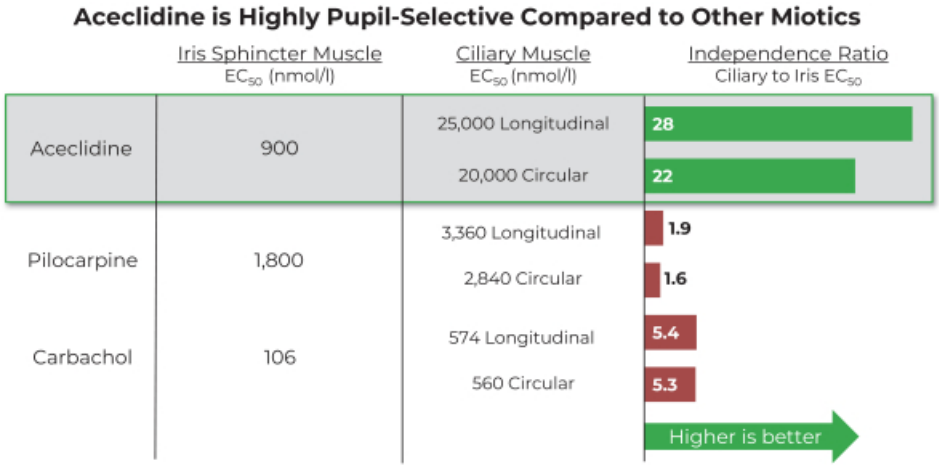


Comparison of Miotics

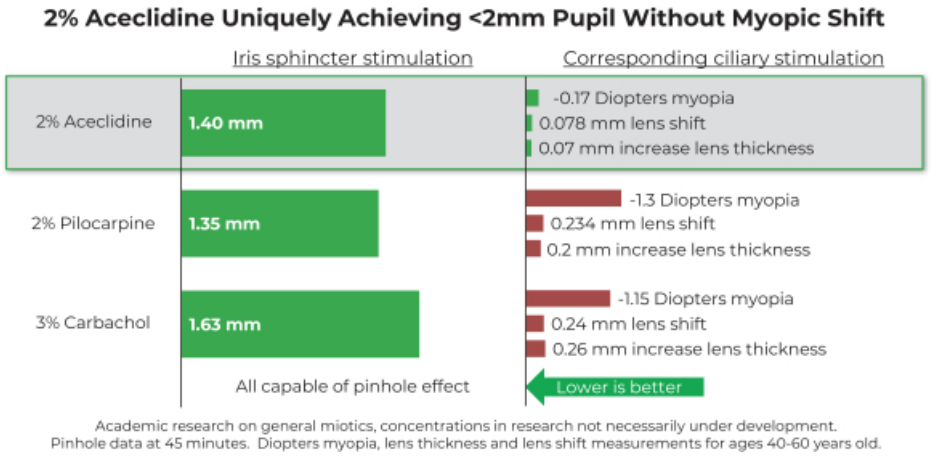
LENZ's product candidates, LNZ100 and LNZ101, are designed and formulated with aceclidine, a unique miotic, to achieve the below 2 mm pupil diameter without impacting distance vision, a key limitation seen by other miotics. Unlike other miotics such as pilocarpine and carbachol, aceclidine's mechanism of action is pupil-selective, meaning it can activate the iris sphincter muscle and cause miosis without overstimulating the ciliary muscles that can cause a myopic shift and impair distance vision. Due to its pupil-selectivity and its ability to reduce the pupil diameter below 2 mm, aceclidine does not require any remaining accommodation to improve near vision, broadening its benefit to older presbyopes whose lens has lost this capacity.

The potency of a miotic towards the iris sphincter muscle or ciliary muscles can be expressed by EC_{50}, the drug concentration required to produce 50% of its maximal effect, and its degree of pupil-selectivity can be expressed by the independence ratio, the ratio of the EC_{50} for the ciliary muscles to EC_{50} for the iris sphincter muscle. Based on a third-party, independent, peer-reviewed, academic study[3] of the selectivity of certain miotics on human intraocular muscles, the independence ratio of aceclidine between the longitudinal ciliary muscle and the iris sphincter muscle can be calculated to be 28, and between the circular ciliary muscle and iris sphincter muscle to be 22 compared to 1.9 and 1.6, respectively, for pilocarpine and 5.4 and 5.3, respectively, for carbachol. The 11 to 17 times higher independence ratio of aceclidine compared to pilocarpine reflects its pupil-selectivity.

[3] H Ishikawa, L DeSantis, PN Patil, Selectivity of muscarinic agonists including (+/-)-aceclidine and antimuscarinics on the human intraocular muscles, *J Ocul Pharmacol Ther*. 1998 Aug;14(4):363-73



In addition to the independence ratio, another independent, peer-reviewed, academic *in vivo* study[4] looked at the correlation of pupil diameter and visual distortion caused by the myopic shift of various miotics, including aceclidine at a concentration different from LENZ's product candidates, which contain 1.75% aceclidine. The distortion is expressed in diopters ("D"), a measurement of focusing strength and distance used widely by ECPs to measure vision. Less change in diopter strength equates to lower disruption to distance vision. The results show that, among 40- to 60-year-old patients, treatment with 2% aceclidine results in reducing the pupil diameter below 2 mm with a negligible myopic shift as compared to 2% pilocarpine and 3% carbachol which drive respectively a -1.3D and -1.15D of myopic shift, respectively. A 1.0D myopic shift changes 20/20 vision to 20/50 distance vision, which can be measured in a decrease of four lines of vision in an eye exam. 20/20 visual acuity means that a person can see at 20 feet what should normally be seen at that distance. 20/50 visual acuity means that a person needs to be at 20 feet to see what a normal person can see at 50 feet. A minimum of 20/40 vision is required to complete a driver's test, so the >1.0D myopic shift caused by pilocarpine and carbachol is enough to make an otherwise able driver now unfit to drive.



[4] J. François; F. Goes, Ultrasonographic Study of the Effect of Different Miotics on the Eye Components, *Ophthalmologica* (1977) 175 (6): 328–338.

When using non-pupil selective miotics, a trade-off is required between improvement in near vision and reduction in distance vision. Because aceclidine is a pupil-selective miotic and can reduce pupil diameter below 2 mm without overstimulating the ciliary muscles, no such compromise is needed.

In addition, contraction of the ciliary muscle by drugs such as carbachol and pilocarpine pull on a critical area of the eye where these muscle fibers connect to the retina. This constant tugging or pulling by the stimulated ciliary muscle can lead to retinal traction, vitreous detachments, secondary retinal pathology and in severe cases, retinal detachments. Besides being described in peer-reviewed literature on chronic pilocarpine use for glaucoma, retinal detachments have also been reported by Vuity users. In August 2022, Vuity's label was amended by the FDA to include a warning related to cases of retinal tears and detachments being reported with Vuity specifically, as opposed to miotics in general. In addition, the revised label advises having ECPs examine the retina of all patients prior to initiation of therapy. Despite the potential severity, concerns related to the risk of retinal tears and detachments ranked third behind low efficacy and low duration of efficacy among reasons why survey participants discontinued treatment with Vuity. Given that aceclidine has minimal effect on the ciliary muscle, LENZ believes that the risk of side effects caused by activating the ciliary muscle are also reduced.

To date, the only approved pharmaceutical treatment for presbyopia is an eye drop using pilocarpine as the active ingredient that is marketed by AbbVie under the brand Vuity. Despite an initial strong commercial launch with over 120,000 unique user prescriptions filled in 2022, the refill rate has lagged, primarily due to lower-than-expected efficacy and duration. Based on LENZ's commissioned survey of 40 ECPs, a majority reported that the barrier to Vuity adoption was that the product either did not work or did not work long enough. An additional survey of 18 optometrists indicated that 66% of their patients did not see duration past four hours despite one of the Vuity clinical trial results showing some effectiveness to the sixth hour. While this aligns with the primary endpoint of at three hours in both Phase 3 trials, the functional benefit was not sufficient enough to support patient needs. The ECPs and their patients identified the low effectiveness and short duration of effectiveness as the key factors for discontinuing use. To resolve the duration issue, AbbVie tested a twice a day dosing of the same formulation following initial approval of Vuity and achieved FDA approval for this updated dosing frequency in March 2023. The updated Vuity label now recommends that a second dose may be administered three to six hours after the first dose. Nonetheless, LENZ believes users are looking for a once-daily solution that can last the full workday, which is further supported by the lack of increased Vuity uptake thus far following FDA approval of this label amendment.

Furthermore, Vuity was primarily tested in younger presbyopes ranging from ages 40 to 55 with the average age of 50 in each of its Phase 3 GEMINI trials. Therefore, LENZ expects that older users may experience even less effect as they have little or no remaining accommodation to be activated to improve near vision, and Vuity has not been shown to reduce pupil diameter below 2 mm.

Overall, the current treatment paradigm for presbyopia leaves much to be desired and is largely limited to symptom management or insufficiently effective pharmaceutical options. Evidence from patient surveys on their experience demonstrates patient appetite for a longer lasting and holistic solution to the treatment of presbyopia.

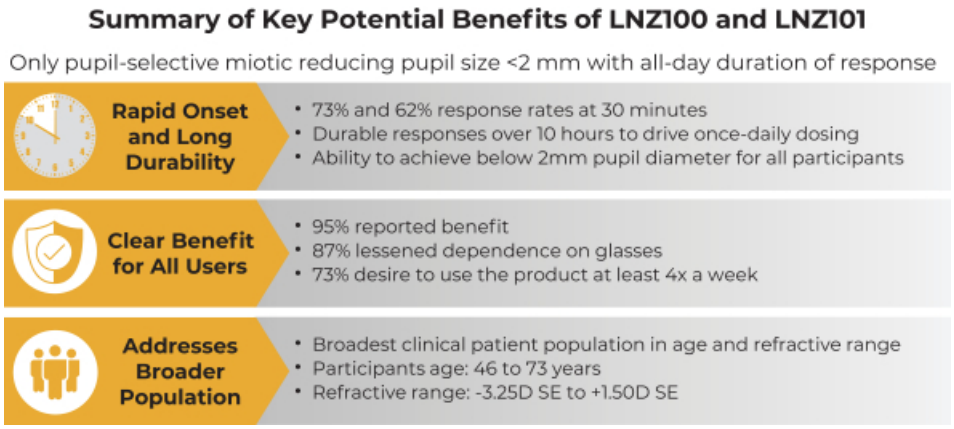
The LENZ Solution: LNZ100 and LNZ101

LENZ's two product candidates, LNZ100 and LNZ101, are single-use, preservative-free eye drops being developed to restore loss of near vision associated with presbyopia:

- **LNZ100** contains 1.75% aceclidine as the sole active ingredient.
- **LNZ101** contains 1.75% aceclidine and 0.08% brimonidine as the active ingredients.

Each product candidate is designed to be a once-daily dose that can potentially provide at least 10 hours of improved near vision. Both are preservative-free enabling each to be single-use, which is a more convenient delivery method for eye drops for users, and further differentiates it from Vuity. In LENZ's INSIGHT trial, both

LNZ100 and LNZ101 achieved their pre-specified primary endpoint of three-lines or greater improvement in near visual acuity without losing one or more lines in BCDVA at one hour post-treatment, with a response rate of 71% ($p<0.0001$) and 56% ($p<0.0001$), respectively, compared to 6% for vehicle. Based on these positive results in its Phase 2 trial, LENZ is currently conducting three Phase 3 CLARITY clinical trials (the "CLARITY" or "Phase 3" trials) with top-line results expected to be announced in second quarter of 2024.



Aceclidine

LENZ selected aceclidine, the key ingredient in LNZ100 and LNZ101, for presbyopia because of its pupil-selective mechanism of action of the agent. The formulation was designed specifically to achieve a below 2 mm pupil diameter without impacting distance vision, a key limitation seen by other miotic agents, such as pilocarpine and carbachol. As evidenced above in the independence ratio and degree of myopic shift, aceclidine as an agent has robust clinical evidence to support the mechanism of action in achieving the key measures to both improve vision in normal and low light, while avoiding a myopic shift that impairs distance vision. Additionally, due to this pupil-selective mechanism of action, aceclidine does not require any remaining accommodation.

Furthermore, aceclidine had also been used in Europe since the 1970s as an eye drop for treatment of glaucoma and marketed by Merck under the brand name Glaucostat. Aceclidine was previously marketed in at least twelve European countries, during which time over 400 million doses were administered up to four times a day and at higher concentrations than proposed for LNZ100 and LNZ101, and it was well-tolerated with no known reports of tachyphylaxis, which is a sudden decrease in drug response. Aceclidine's pupil-selective mechanism of action and reduced effect on the ciliary muscles made it a less desirable glaucoma treatment because it did not lower pressure as much as other marketed miotics. For the same reasons, it is potentially a better treatment for presbyopia than those other miotics. Though it has been used extensively throughout Europe, aceclidine was never commercialized in the United States, reportedly because the lyophilized, or freeze-dried, nature of the glaucoma product presented complex supply chain issues. Nonetheless, given aceclidine's broad safety profile, documented through decades of commercial use in Europe, and unique mechanism of action, LENZ believes LNZ100 and LNZ101 have the potential to treat a broad population of presbyopes globally as they are ready-to-use, stable liquid formulations of aceclidine.

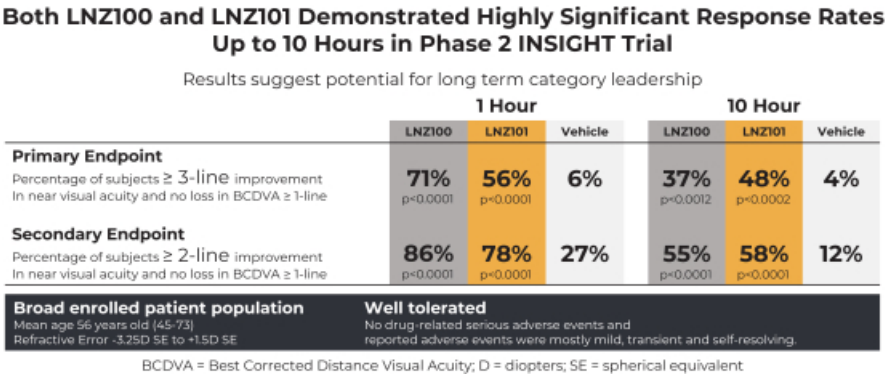
Brimonidine

LNZ101 also contains the active ingredient brimonidine, an α2 adrenergic receptor agonist, which has been shown to extend the miotic effect of aceclidine. Peripheral α2 agonist activity results in vasoconstriction of blood vessels on the surface of the eye and reduces the acute aqueous humor flow. This allows for greater retention of

drug on the ocular surface, causing increased penetration of the aceclidine into the anterior chamber and prolonging its miotic effect. Similar to LENZ's INSIGHT trial, recent ocular and systemic pharmacokinetic studies have demonstrated that the presence of brimonidine provided a longer duration for the presence of accompanying drugs in the aqueous and anterior chamber while reducing systemic effects. Higher aqueous concentrations of the accompanying drugs were found and for a longer period of time when compared to the same drug absent the presence of brimonidine. This further reduces systemic absorption while prolonging the intraocular effects of the drugs present.

INSIGHT: Phase 2 Clinical Trial

In October 2022, LENZ reported topline results from the INSIGHT trial, a multi-center, double-masked, randomized, crossover, active and vehicle-controlled Phase 2 clinical trial that evaluated the efficacy and safety of LNZ100 and LNZ101. The product candidates were tested in a broad population of presbyopes ranging from ages 46 to 73, with an average age of 56, and refractive errors ranging from -3.25D SE to +1.50D SE. Some participants had previously undergone prior vision correction, such as LASIK, or cataract extraction with lens implant (referred to as "pseudophakia"). Both LNZ100 and LNZ101 achieved the pre-specified primary endpoint of three-lines (15 letters) or greater improvement in near visual acuity without losing one (5 letters) or more lines in BCDVA at one hour post-treatment, with a response rate of 71% ($p<0.0001$) and 56% ($p<0.0001$), respectively, compared to 6% for vehicle.



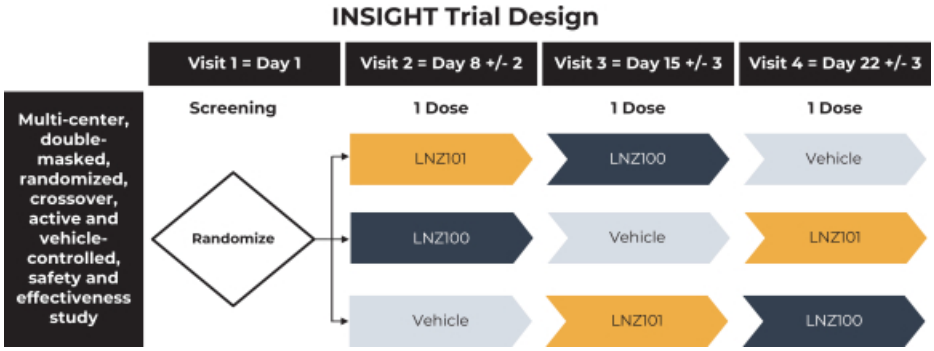
BCDVA = Best Corrected Distance Visual Acuity; D = diopters; SE = spherical equivalent

Trial Design

The trial was designed as a crossover study where each participant received each treatment (LNZ100, LNZ101 or vehicle) once throughout the trial, which reduces inter-subject variability, and enables more efficient comparison of the potential effects of the tested product candidates than in a parallel design study. At the first visit, the participants were randomly assigned to one of three cohorts, which determined the order in which the participant would be treated with LNZ100, LNZ101 or vehicle across the three subsequent visits. A total of 68 presbyopes were enrolled and randomized. Three participants did not re-qualify against the inclusion criteria on the second visit and another two were unable to meet the study visit schedule, just before receiving their initial dose, so only 63 received an initial dose of LNZ100, LNZ101 or vehicle. Two participants did not continue after their initial dose; one who could no longer meet the study visit schedule and one who discontinued treatment due to experiencing an adverse event that was not treatment related. Overall, 62 participants received LNZ100, 62 participants received LNZ101. 61 participants received vehicle, and 61 received all three treatments.

While the safety analysis applied to all participants treated, the efficacy analysis was limited to only participants who met the specified standard of near visual acuity on the date of treatment, who collectively are described in the study protocol as the Modified Intent-to-Treat ("mITT") population. As a result, the efficacy

results for the INSIGHT trial are reported only on a total of 49 participants who received LNZ100, 50 who received LNZ101 and 51 who received vehicle. The near visual acuity is tested at each date of treatment because visual acuity often fluctuates and can be impacted by a number of factors, including fatigue, dry eyes, blood pressure or health issues. In order to qualify for mITT, participants must have near visual acuity of 0.42 logMAR or higher, which is equivalent to around 20/50 vision or worse. In all cases, the participants who were excluded from the mITT population at a particular visit had a near visual acuity measured to be lower than 0.42 logMAR.



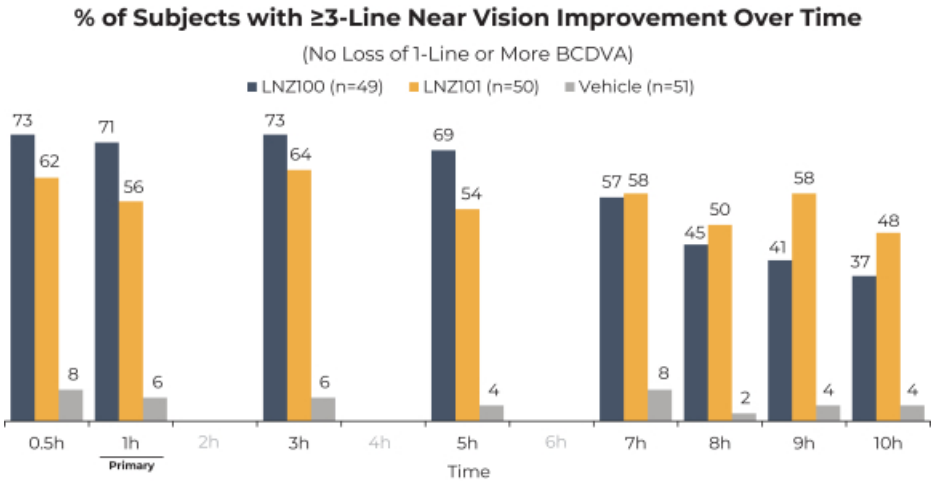
Each participant was monitored and visual acuity was measured by a standardized eye test at certain timepoints from 30 minutes to 10 hours post-treatment. LENZ also measured the impact on distance vision in normal and low light at various timepoints. The pre-specified primary endpoint was the percentage of three-lines or greater improvement in near visual acuity in the study eye at one hour post-treatment without losing one or more lines in BCDVA. A pre-specified secondary endpoint was the percentage of two-lines or greater improvement in near visual acuity in the study eye at one hour post-treatment without losing one or more lines in BCDVA. Participants completed a patient-reported outcome questionnaire six hours post-treatment and other assessments and measurements, such as the pupil diameter, which is considered a biomarker for near vision improvement, were also taken. BCDVA in this context refers to the best possible distance vision that an individual's eye can see using corrective lenses. BCDVA is a standard used in ophthalmology and optometry to determine the refractive state of the eye (nearsighted vs. farsighted). Having subjects use appropriate corrective lenses to see well at distance allows assessment of near vision deficits and comparisons across patients who may have different distance visual acuity. Additionally, LENZ believes that using BCDVA provides the most accurate representation of the impact of LNZ100 and LZN101, because such product candidates are intended to be used together with any distance corrective lenses that a user may need.

Trial Results

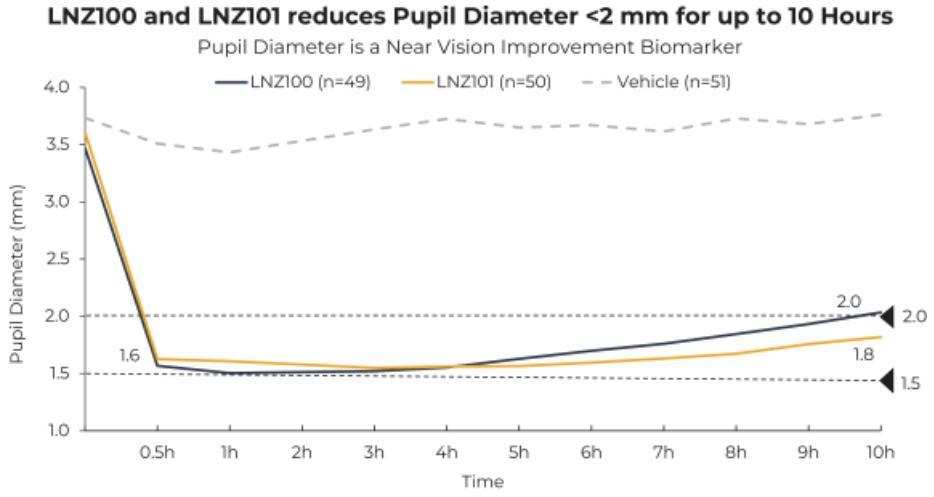
As shown in the figure below, both LNZ100 and LNZ101 achieved the primary endpoint of three-lines or greater improvement in near visual acuity at one hour post-treatment, without losing one or more lines in BCDVA, with a response rate of 71% ($p<0.0001$) and 56% ($p<0.0001$), respectively, compared to 6% for vehicle. In the description of LENZ's clinical trials herein, p or p-values represent the probability that random chance caused the result (e.g., $p<0.0001$ means that there is less than a 0.01% probability that the difference between the vehicle and the treatment groups is due to random chance). A p-value ≤ 0.05 is a commonly used criterion for statistical significance and is usually considered supportive of a finding of efficacy by regulatory authorities.

Both LNZ100 and LNZ101 showed rapid onset with response rates of 73% ($p<0.0001$) and 62% $p<0.0001$), respectively, at 30 minutes post-treatment, the earliest timepoint measured, and both LNZ100 and LNZ101 maintained statistical significance of three-lines or greater improvement in near visual acuity compared to vehicle for all timepoints measured. At 10 hours post-treatment, the last measured timepoint, 37% ($p<0.0012$) of users dosed with LNZ100 and 48% ($p<0.0002$) of users dosed with LNZ101 maintained a three-lines or greater

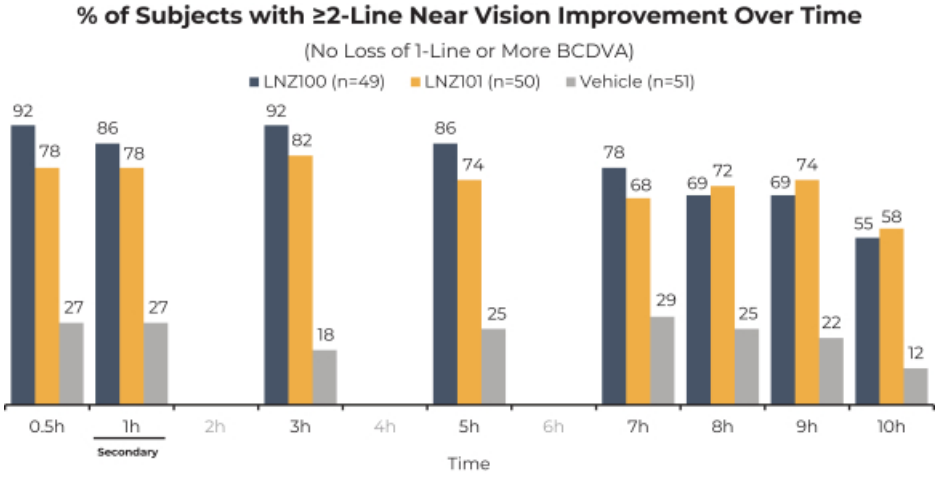
improvement in near visual acuity compared with 4% of users dosed with vehicle. LNZ101 statistically separates from LNZ100 at nine hours ($p<0.04$).



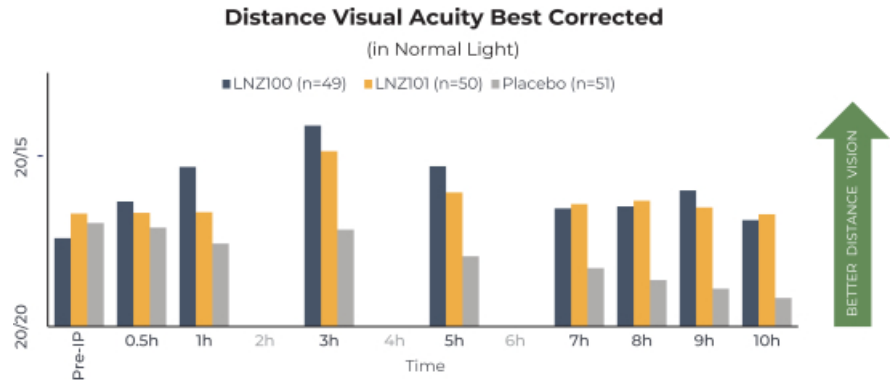
As shown in the figure below, the average pupil diameter of users treated with LNZ100 and LNZ101 reduced to approximately 1.6 mm at 30 minutes post-treatment for both product candidates. The pupil diameter was observed to correlate to improvement in near visual acuity, with LNZ100 maintaining the pupil diameter in the target range of 1.5 to 2 mm for up to 10 hours, whereas LNZ101 still maintained the average pupil diameter in the target range at the 10 hour mark, which was the last timepoint measured. As described earlier in "*Approaches to Presbyopia and Their Limitations – Eye Drops*", 69% of participants whose pupil diameters dropped below 2 mm demonstrated three-lines or greater improvement in visual acuity, compared to 20% of participants whose pupil diameters dropped between 2 mm and 2.5 mm. When pupil diameter was above 2.5 mm, the chance of three-lines or greater improvement in near visual acuity was 3% or less.



Both LNZ100 and LNZ101 also achieved the pre-specified secondary endpoint of two-lines (10 letters) or greater improvement in near visual acuity without losing one or more lines in BCDVA at one hour post-treatment, with a response rate of 86% ($p<0.0001$) and 78% ($p<0.0001$), respectively, compared to 27% for vehicle. Both LNZ100 and LNZ101 showed rapid onset with response rates of 92% ($p<0.0001$) and 78% ($p<0.0001$), respectively, at 30 minutes post-treatment, the earliest timepoint measured, and both LNZ100 and LNZ101 maintained statistical significance of two-lines or greater improvement in near visual acuity compared to vehicle for all timepoints measured. At 10 hours post-treatment, the last measured timepoint, 55% ($p<0.0001$) of users dosed with LNZ100 and 58% ($p<0.0001$) of users dosed with LNZ101 maintained a two-lines or greater improvement in near visual acuity, without losing one or more lines in BCDVA, compared to 12% of users dosed with vehicle. Standard clinical practice considers two-lines or greater improvement in near visual acuity to be clinically meaningful.



LNZ100 and LNZ101 had no adverse impact on distance vision across all timepoints measured including 30 minutes and 1, 3, 5, 7, 8, 9 and 10 hours post-treatment and at most time points, there was a small improvement (less than five letters) in BCDVA. LENZ believes these improvements are due to pupil constriction which block the peripheral light that is most likely to travel across aberrations, or nuanced distortions within the eye's structure, and cause blurry vision. LENZ believes the reduction in distance vision observed in the placebo group is due to progressive eye fatigue across multiple assessments for each timepoint measurement. Importantly, neither LNZ100 nor LNZ101 exhibited an adverse impact to distance vision in low light at both timepoints measured, one and 10 hours post-treatment.



Both LNZ100 and LNZ101 were well tolerated with no drug-related serious adverse events. The only reported adverse events with an incidence at 5% or more were instillation site pain and headaches, and reported adverse events were mostly mild, transient and self-resolving.

Majority of AEs were mild, transient and self-resolving

	LNZ100 N=62 n(%)	LNZ101 N=62 n(%)	Vehicle N=61 n(%)
Ocular TEAEs			
Vision Blurred	0 (0%)	0 (0%)	7 (12%)
Instillation site pain	3 (5%)	2 (3%)	0 (0%)
Non-Ocular TEAEs			
Headache	3 (5%)	9 (15%)	1 (2%)

* All Other TEAEs ≤4%

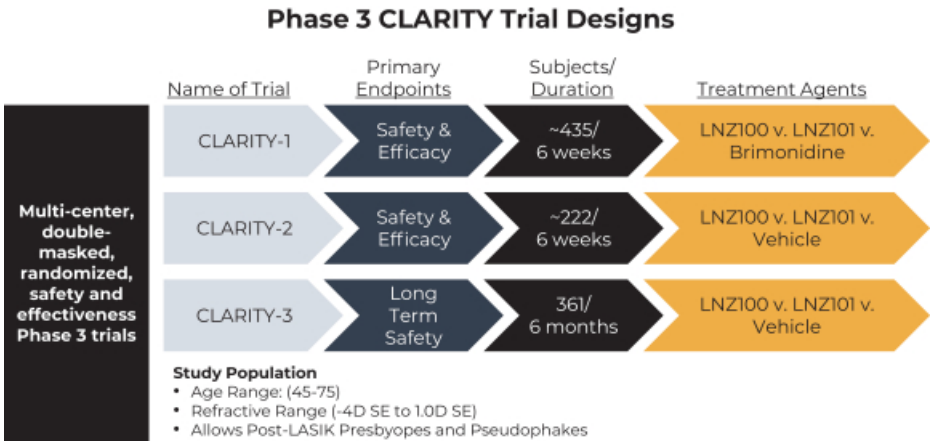
- AE profile shows comfortable product
- No drug related serious adverse events
- European historical use of 400M doses of aceclidine confirms observed low side effect profile

Based on their clinical trial results and patient reported outcomes, 94% of the subjects treated with LNZ100 or LNZ101 regained functional near vision, evidenced by a near visual acuity of 20/40 or better which would enable them to read the fine print on a sugar packet, when none could do so prior to dosing. Importantly, 95% of subjects reported that they noticed improvement in near vision, 87% indicated they expected to be less dependent their dependent on their glasses, and of the 86% who wished to continue to use LNZ100 or LNZ101 at home, 73% indicated that they were likely to use the product at least four times a week.

CLARITY: Phase 3 Clinical Trials

In December 2022, LENZ initiated its CLARITY study, which comprises three separate Phase 3 trials that each permit subjects ranging from ages 45 to 75, the same age range used in the INSIGHT trial, and a refractive range of -4.0D SE to +1.0D SE, which is similar to the refractive range of -3.25D SE to +1.50D SE for the INSIGHT trial. In line with the INSIGHT trial, the CLARITY trials permit enrollment of users who had previously undergone prior vision correction, such as LASIK, or cataract extraction with lens implant.

- ***CLARITY-1*** ("NCT05656027") is a six-week, multi-center, double-masked, randomized trial evaluating the efficacy and safety of LNZ101 and LNZ100. CLARITY-1 will enroll about 435 subjects. Enrolled subjects will be randomized to receive LNZ101, LNZ100 or brimonidine (at a 1:1:1 ratio) bilaterally. Similar to the INSIGHT trial, the primary efficacy endpoint is the percentage of subjects who achieve three-lines or greater improvement in BCDVA near vision relative to brimonidine on Day 1, but for the CLARITY-1 trial, this endpoint will be determined at three hours post-treatment rather than one hour post-treatment. Secondary endpoints will, amongst others, include the percentage of subjects who achieve three-lines or greater improvement in BCDVA near vision relative to brimonidine at timepoints ranging from 30 minutes to 10 hours post-treatment.
- ***CLARITY-2*** ("NCT05728944") is also a six-week, multi-center, double-masked, randomized, Phase 3 evaluation of the efficacy and safety of LNZ101 and LNZ100 for the treatment of presbyopia. CLARITY-2 will enroll about 222 subjects. Enrolled subjects will be randomized to receive LNZ101, LNZ100 or vehicle (at a 1:1:1 ratio) bilaterally. Similar to the CLARITY-1 trial, the primary efficacy endpoint is the percentage of subjects who achieve three-lines or greater improvement in BCDVA near vision at three hours post-treatment relative to vehicle on Day 1. Secondary endpoints will, amongst others, include the percentage of subjects who achieve three-lines or greater improvement in BCDVA near vision relative to vehicle at timepoints ranging from 30 minutes to 10 hours post-treatment.
- ***CLARITY-3*** ("NCT05753189") is a six-month multi-center, double-masked, randomized, Phase 3 long-term safety study of LNZ101 and LNZ100 for the treatment of presbyopia. Enrolled subjects have been randomized to receive LNZ101, LNZ100 or vehicle (at a 2:2:1 ratio) bilaterally.



LENZ's multi-pronged approach to expedite patient recruitment, site selection and training has substantially accelerated enrollment. As of November 28, 2023, all sites are activated, CLARITY-1 and CLARITY-3 are fully enrolled, and CLARITY-2 is 97% enrolled. LENZ has also engaged in hands-on, in-person training and maintained active presence at all trial sites to ensure timely clinical trial execution and high quality data collection.

Subject to successful completion of the CLARITY trials, LENZ plans to submit an NDA for at least one of its product candidates to the FDA in mid-2024. If approval is granted, LENZ will rigorously evaluate the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback to select and commercialize the product LENZ believes will have the greatest commercial potential, with a launch target date in mid-2025.

Currently Marketed Eye Drops

Vuity was approved as the first pharmaceutical treatment for presbyopia in October 2021. Despite enthusiasm for the concept of an eye drop improving near vision throughout the full workday, Vuity's reportedly lower than expected efficacy, duration and adverse event profile, contributed to lower than anticipated prescription refill rates. To resolve the duration issue, AbbVie tested a twice a day dosing of the same formulation following initial approval of Vuity and achieved FDA approval for this updated dosing frequency in March 2023. In addition, Vuity's label was amended to include a warning and precaution related to rare cases of retinal detachment and retinal tears reported with miotics, including Vuity.

Vuity's FDA approval in October 2021 was based on results from two 30-day pivotal, Phase 3, randomized, double-masked, vehicle-controlled trials, GEMINI 1 and GEMINI 2. A total of 750 participants aged 40 to 55 with presbyopia with best distance correction inclusion criteria of sphere ranging from -4.00D to +1.00D (inclusive) and cylinder $\leq \pm 2.00$D were randomized in these two trials and patients were instructed to administer one drop of Vuity or vehicle daily in each eye. In both trials, a statistically significant but minority portion of participants (31% of patients in GEMINI 1 and 26% of patients in GEMINI 2) showed three-lines or greater improvement in Distance Corrected Near Visual Acuity ("DCNVA") which is equivalent to BCDVA measured at 40 centimeters, without losing more than 1 line of Corrected Distance Visual Acuity ("CDVA") at three hours post-treatment (the last statistically significant timepoint in GEMINI 2) on Day 30. The peak response rate at 1 hour post-treatment relative to vehicle in GEMINI 2 is 25%.

Although LENZ's CLARITY trials are focused on enrolling presbyopes from ages of 45 to 75, the GEMINI trials enrolled a younger patient population ranging from ages 40 to 55 with an average age of 50 in each trial and

predominantly emmetropic subjects (76% were emmetropes with sphere ranging from –0.50 D to +0.75 D and cylinder: ≤0.75 D). Moreover, data from the GEMINI 1 trial demonstrated that Vuity could not achieve a pupil diameter below 2 mm at any timepoint over the course of 10 hours post-treatment.

Commercialization

Although LENZ plans to submit NDAs for one or both of its product candidates, it intends to commercialize a single product candidate. LENZ's decision will be informed by the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback. LENZ's objective is to commercialize the product that they believe will most effectively meet the needs of the widest range of presbyopes and best create loyalty and value based on an "all eyes, all day" brand mission.

LENZ is focused on commercializing in the United States on its own. In addition, LENZ is developing regulatory strategies and intend to opportunistically seek partnerships for Europe, Canada and other markets. LENZ has recently entered into a license and collaboration agreement with Ji Xing to develop product candidates and products containing aceclidine and brimonidine for the treatment in patients with presbyopia in Greater China. See the section of this proxy statement/prospectus titled "*LENZ's Business—License and Collaboration Agreement with Ji Xing Pharmaceuticals Hong Kong Limited."* LENZ is continuing to evaluate potential partnerships to pursue regulatory and commercialization in other markets.

Experienced Commercial Team

LENZ plans to use the cash and cash equivalents from the merger and the Graphite private placement, in part, to continue to build the sales and marketing infrastructure required to successfully commercialize its lead product candidate in anticipation of FDA approval.

As of June 5, 2023, LENZ has substantially completed hiring of all senior leadership roles in the commercial team, including adding industry veterans with extensive experience in the pharmaceutical space. LENZ's commercialization effort is led by its Chief Commercial Officer Shawn Olsson, who manages a team of seasoned sales and marketing executives, who have helped launch and commercialize over a dozen ophthalmic products and therapies, including Acuvue, Alphagan P, Combigan, Dailies AquaComfort Plus, Durysta, Lumigan, Pred Forte, Refresh, Restasis, Truetear, and Vuity, as well as major user-focused brands such as Botox, Herbalife and Ray-Ban.

To ensure immediate commercialization upon the potential approval of its lead product candidate, LENZ is timing the expansion of its existing commercial capabilities and the development of a sales organization of 100 to 150 individuals to coincide with the expected timing of such approval.

Proactive Execution of Commercial Strategy

The LENZ commercial team has already made substantial progress in executing on its foundational commercial strategy, including selection and submission of a proprietary name, selection of advertising agency, development of sales organization size and design, ECP segmentation and targeting, selection of sampling vendor, selection of e-pharmacy partner, selection of its third-party logistics ("3PL") provider, obtaining relevant state licensures, and set up of a customer relationship management system.

ECP-Focused Sales Strategy

LENZ plans to launch with its own sales organization in the United States, which it envisions will expand to 100 to 150 individuals. LENZ's strategy involves initially targeting and partnering with the estimated 15,000 ECPs who prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022. Additionally, LENZ will expand beyond the initial set of high-prescribing ECPs by demonstrating the unique

value proposition of providing a treatment for presbyopia. LENZ will leverage its strong relationships with key opinion leaders to facilitate awareness regarding the importance of reducing the pupil diameter below 2 mm and using a pupil-selective miotic to avoid overstimulating the ciliary muscle. LENZ's sales strategy will empower ECPs to be actively involved in the diagnosis and treatment of presbyopia for the aging population, including a consumer sampling program described in "*Consumer Sampling Strategy*." If its product is approved, LENZ expects to see more ECPs begin to prescribe prescription-based eye drops, which will drive more patients requesting prescriptions who otherwise may not have sought appointments with ECPs for other eye conditions. If it elects to expand its product offerings in the future, LENZ will be able to leverage a larger community of prescribing ECPs to support product uptake.

Consumer Focused Strategy

If the NDA is approved, LENZ also plans to deploy, in parallel, a cost-effective, highly targeted and digitally-focused consumer strategy designed to efficiently target the early adopters among the estimated 128 million presbyopes in the United States to drive user awareness and interest through digital, offline and social marketing to create brand awareness, develop brand loyalty and eventually enable long-term brand durability and recognition. LENZ's strategy involves driving consumer awareness of an effective treatment of presbyopia with prescription eye drops and creating an emotional connection to returning to life prior to presbyopia. A key component to consumer experience is LENZ's sampling program that will provide a free option for potential users to try as described in "*Consumer Sampling Strategy*". To meet the long term usage needs of young and old presbyopes, LENZ plans to offer both retail access as well as collaborate with e-pharmacy vendors to provide easy and convenient prescription fulfillment and home delivery.

Consumer Sampling Strategy

If the NDA is approved, LENZ intends to establish a consumer sampling program that will be a key component to the consumer experience and reduce barriers to trial and adoption. LENZ believes its product candidates are highly suitable for a consumer sampling program as users in its clinical trials have experienced rapid onset and noticeable near vision improvement after a single dose. The LENZ commercial team has already engaged with vendors for storage and distribution of samples to support both field representative delivery and mail delivery to ECPs. With in-office samples, a potential customer can try the product at the ECP's offices or at home without having to fill a prescription. The sampling program is a strategy for potential customers to experience near vision improvement of the product at no-cost, which can accelerate customer acceptance and desire to use the product.

Self-Pay

If the NDA is approved, LENZ intends to commercialize its product through the self-pay healthcare marketplace, without third-party reimbursement. LENZ believes pursuing a non-reimbursed product strategy will allow for strategic advantages in the United States, including immediate user access without having to negotiate with formularies and insurers, pricing and marketing flexibility, and without being subject to the Inflation Reduction Act of 2022.

Manufacturing

LENZ's LNZ100 product candidate is a ready-to-use, self-administered, once-daily eye drop that is a formulation of aceclidine hydrochloride together with commonly used excipients. Its LNZ101 product candidate is also a ready-to-use, self-administered, once-daily eye drop, but is a formulation of aceclidine hydrochloride and brimonidine tartrate together with commonly used excipients. Both investigational products are delivered via a single-use Blow-Fill-Seal ("BFS") container and are preservative-free.

LENZ does not currently own or operate facilities for manufacturing, storing, distributing or testing its product candidates and products. It currently uses different contract manufacturing organizations ("CMOs") to

supply its active pharmaceutical ingredients ("APIs") aceclidine hydrochloride and brimonidine tartrate, and formulate and fill its investigational drug products ("DP") LNZ100 and LNZ101. All of LENZ's CMOs, including analytical and distribution chain partners, have been inspected by the FDA for compliance with current Good Manufacturing Practices ("cGMP") regulatory guidelines. A Drug Master File ("DMF") is on file with the FDA for each API. Commercial supply agreements have been secured with LENZ's API suppliers with commercially reasonable terms to meet its planned clinical and commercial activities, and it is continuing to negotiate and enter additional contracts for secondary supply. Similarly, LENZ has secured both clinical and commercial-scale supply. LENZ's manufacturing and testing processes are common to the pharmaceutical and ophthalmic industry and it has identified and is working with additional API suppliers for both aceclidine hydrochloride and brimonidine tartrate and identified secondary DP manufacturers with similar equipment for additional commercial supply. LENZ has initiated process transfer activities for both the API suppliers and DP manufacturers.

LENZ is in negotiations to secure its 3PL provider. It expects that the 3PL provider will support cold storage commercial warehousing and distribution activities, the drug product will ship directly from the DP CMO via a qualified shipping vendor at controlled cold storage temperature to the 3PL provider, and the 3PL provider will maintain inventory and comply with the Drug Supply Chain Security Act ("DSCSA") requirements for product serialization and track and trace capabilities.

Competition

The biotechnology, pharmaceutical and ophthalmology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on intellectual property. LENZ believes that its product candidates, intellectual property portfolio, business strategy, internal capabilities, and experience provide it with competitive advantages. However, LENZ faces competition from many different sources, including large and specialty pharmaceutical, biotechnology and ophthalmology companies, academic research institutions and governmental agencies, and public and private research institutions. Any product candidate LENZ develops and commercialize will have to compete with existing therapies as well as therapies currently in development and that may be developed in the future. LENZ believes that the key competitive factors affecting the success of any of its product candidates will include efficacy, safety profile, convenience, cost, level of promotional activity devoted to them and intellectual property protection.

As its product candidates are for the treatment of presbyopia, LENZ may face competition from a variety of companies developing or marketing other pharmaceutical presbyopia therapies, including AbbVie (formerly Allergan), Bausch & Lomb, Eyenovia, Glaukos, Johnson & Johnson, Orasis, OSRX Pharmaceuticals (an affiliate of Ocular Science), Viatris (through licensing of Ocuphire's presbyopia products), Visus Therapeutics and Vyluma. A large majority of the new pharmaceutical drops are miotic. Other than Visus which is developing a carbachol-based eye drop, most of the drops in clinical development are based on pilocarpine, similar to Vuity.

Many of LENZ's current or potential competitors, either alone or with their collaboration partners, have substantially greater financial resources and may have greater expertise in research and development, manufacturing, preclinical testing, conducting clinical trials and marketing approved products than LENZ does. Mergers and acquisitions in the pharmaceutical, biotechnology and ophthalmology industries may result in even more resources being concentrated among a smaller number of its competitors. Smaller or early-stage companies may also prove to be strong competitors, particularly through collaborative arrangements with large and established companies. These companies also compete with LENZ in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies and intellectual property complementary to, or necessary for, its product candidates. Because of the size of the ophthalmology and vision correction markets and the high growth profile of such markets, LENZ anticipates that companies will dedicate substantial resources to developing competing products. LENZ believes that the principal competitive factors in these markets will include:

- improved outcomes for users and other product quality attributes;

- product innovation;
- acceptance by ECPs;
- ease of use and reliability;
- regulatory status and speed to market; and
- marketing and product price.

LENZ expects that any such treatment options that are successfully developed could eventually be available both within and outside the United States. Consolidations and mergers and acquisitions in the pharmaceutical, medical device and biotechnology industries may result in even more resources being concentrated among a smaller number of its competitors. LENZ's commercial opportunity could be reduced or eliminated if its competitors develop or market products or other novel therapies that are more effective, safer or less costly than its current or future products, or obtain regulatory approval for their products more rapidly than LENZ may obtain approval for its products. LENZ's success will also be based in part on its ability to identify, develop and manage a portfolio of products that are safer and more effective than competing therapies.

Intellectual Property

LENZ has developed and continues to expand its patent portfolio for treatment of presbyopia with LNZ100 and LNZ101. As of November 28, 2023, LENZ has at least 39 issued patents. 18 of these patents are in the United States, and 21 of these patents are in other countries throughout the world. LENZ has at least 21 granted patents in Australia, Brazil, Canada, China, India, Japan, Mexico, and Singapore. These patents are expected to expire between 2034 and 2041. LENZ patents cover compositions for and methods of treating presbyopia with LNZ100 and LNZ101. LENZ also has at least 63 pending applications filed in Argentina, Australia, Bolivia, Brazil, Canada, China, European Union (EU), Hong Kong, India, Japan, Korea, Macao, Mexico, Singapore, Taiwan, the United States, Uruguay, and the Patent Cooperation Treaty system.

Patents related to LNZ100 and LNZ101 may be eligible for patent term extensions in certain jurisdictions, including up to five years in both the United States and the EU, upon approval of commercial use of the corresponding product by a regulatory agency in the jurisdiction where the patent was granted.

No drug product containing aceclidine, an active pharmaceutical agent of LNZ100 and LNZ101, has been approved yet in the United States under section 505(b) of the Federal Food, Drug and Cosmetic Act, for any indication. Therefore, LENZ believes either LNZ100 or LNZ101, whichever is approved first, if approved at all, could be eligible for five years of NCE exclusivity in the United States upon such approval so long as no other drug product containing aceclidine is approved by the FDA before approval of such product candidate. Further, as LNZ100 and LNZ101 have not previously been approved in the EU for any indication, LNZ100 and LNZ101 may be eligible for eight years of data exclusivity, as well as two years of market exclusivity upon approval in the EU. In the EU, an additional one year of exclusivity may be obtained if LNZ100 and LNZ101 is approved for a new indication that provides a significant clinical benefit.

In addition to patent protection, LENZ relies on trade secret protection and know-how to expand its proprietary position around its chemistry, technology and other discoveries and inventions that LENZ considers important to its business.

LENZ also seeks to protect its intellectual property in part by entering into confidentiality agreements with companies with whom it shares proprietary and confidential information in the course of business discussions, and by having confidentiality terms in its agreements with employees, consultants, scientific advisors, clinical investigators, and other contractors and also by requiring its employees, commercial contractors, and certain consultants and investigators, to enter into invention assignment agreements that grant LENZ ownership of any discoveries or inventions made by them while in the employ of LENZ.

License and Collaboration Agreement with Ji Xing Pharmaceuticals Hong Kong Limited

In April 2022, LENZ entered into a License and Collaboration Agreement with Ji Xing Pharmaceuticals Hong Kong Limited (Ji Xing) pursuant to which it granted Ji Xing (i) an exclusive (even as to LENZ), royalty-bearing, nontransferable license, with the right to grant sublicenses (LENZ's prior written consent is required for sublicenses for commercialization purpose), under the technology LENZ controls including know-how and patents for Ji Xing to develop, use, import and sell pharmaceutical products containing aceclidine and brimonidine for the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater China"), (ii) a non-exclusive, nontransferable license, with the right to grant sublicenses, under the same technology LENZ controls to manufacture the same products for the same use in Greater China, and (iii) a first right of negotiation for Ji Xing to license any other product that LENZ develops or commercializes containing aceclidine or brimonidine for uses outside of the treatment of presbyopia in Greater China. LENZ retains the rights to use the same technology to perform its obligations in the agreement and the non-exclusive right to manufacture and have manufactured such products in Greater China. The agreement provides that LENZ shall refrain from developing or commercializing any competing product, or knowingly enabling a third party to develop or commercialize a product containing aceclidine or brimonidine that would reasonably be expected to result in off-label sales of such products, for the treatment of presbyopia in humans in Greater China. Under the terms of the agreement, LENZ received an upfront, non-refundable payment of $15.0 million, and an investment from three funds managed or advised by RTW Investments, LP for an aggregate purchase price of approximately $10.0 million in exchange for shares of LENZ's Series A-1 preferred stock. LENZ is also eligible to receive an additional up to $15.0 million in development milestone payments, $80.0 million in sales milestone payments, tiered, escalating royalties in the range of 5% to 15% on net sales of such products by Ji Xing, its affiliates or sublicensees in Greater China during the royalty term, and tiered, deescalating royalties in the range of 15% to 5% of Ji Xing's sublicensing income prior to the regulatory approval of the first such product in Greater China. Royalties are subject to adjustment if no valid claim of a patent is covering such product, if a generic product exceeds 10% of the market share on a volume basis, or if a third party license is necessary to manufacture or sell such products. The royalty term in each region is on a product-by-product basis and the longer of (a) expiration of the last valid claim of a patent covering such product in such region, (b) expiration of regulatory exclusivity for such product in such region, and (c) ten years from the date of first commercial sale of such product in such region. Ji Xing may terminate the agreement in its entirety at any time upon 180 days' prior written notice. Either party may terminate the agreement for the other's uncured and material breach, subject to a disputed breach resolution mechanism. Either party may also terminate the agreement upon the other party's insolvency. LENZ may terminate the agreement upon 60-days' prior written notice if Ji Xing or its affiliates or sublicensees challenge the validity, enforceability, or scope of any licensed patent.

Government Regulation

LENZ's product candidates and its operations are subject to extensive regulation by the Food and Drug Administration ("FDA") and other federal and state authorities in the United States, as well as comparable authorities in other countries. For example, its current product candidates, LNZ100 and LNZ101, which are ophthalmic pharmaceutical products delivered through a single-use eye dropper device, are subject to regulation as drug-device combination products in the United States.

The FDA and other federal, state, local and foreign authorities regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and combination products. Generally, before a new drug can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific for each regulatory authority, submitted for review and approved by the regulatory authority.

U.S. Drug Development

In the United States, the FDA regulates drugs under the Food, Drug, and Cosmetic Act ("FDCA") and its implementing regulations. Drug products and substances are subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or post-market may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on LENZ.

LENZ's current product candidates and any future small molecule product candidates must be approved by the FDA through the new drug application ("NDA") process before they may be legally marketed in the United States. The process generally involves the following:

- Completion of extensive preclinical studies in accordance with applicable regulations, including the FDA's good laboratory practice ("GLP") requirements;
- Submission to the FDA of an investigational new drug ("IND") application, which must become effective before clinical trials may begin;
- Approval by an independent institutional review board ("IRB") or ethics committee at each clinical trial site before each trial may be initiated;
- Performance of adequate and well-controlled clinical trials in accordance with applicable IND regulations, good clinical practice ("GCP") requirements and other clinical trial-related regulations to establish the safety and efficacy of an investigational product for each proposed indication;
- Preparation and submission to the FDA of an NDA;
- A determination by the FDA within 60 days of its receipt of an NDA to file the application for review;
- Satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities where the drug product will be produced to assess compliance with current good manufacturing practice ("cGMP"), requirements to assure that the facilities, methods and controls are adequate to preserve the drug identity, strength, quality, and purity;
- Potential FDA audit of the preclinical study and/or clinical trial sites that generated the data in support of the NDA; and
- FDA review and approval of the NDA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug in the United States; and
- Compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy ("REMS"), and the potential requirement to conduct post-approval studies.

Preclinical and Clinical Studies

The preclinical and clinical testing and approval process requires substantial time, effort and financial resources, and LENZ cannot be certain that any approvals for any future product candidates will be granted on a timely basis, or at all.

Preclinical tests generally involve laboratory evaluations of drug chemistry, formulation, and stability, as well as studies to evaluate toxicity in animals, including pharmacology, pharmacokinetics, toxicokinetic, and

metabolism studies that support subsequent clinical testing in humans. The results of the preclinical studies, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, are submitted to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational product to humans and must become effective before clinical trials may begin.

Long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

The central focus of an IND submission is the general investigation plan and the protocol(s) for human studies. An IND must become effective before clinical trials may begin. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

For each successive clinical trial conducted with the investigational drug, a separate, new protocol submission to an existing IND must be made, along with any subsequent changes to the investigational plan. Sponsors are also subject to ongoing reporting requirements, including submission of IND safety reports for any serious adverse experiences associated with use of the investigational drug or findings from preclinical studies suggesting a significant risk for human subjects, as well as IND annual reports on the progress of the investigations conducted under the IND.

Clinical studies involve the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent amendments to the protocol, must be submitted to the FDA as part of the IND.

Furthermore, each clinical trial must be reviewed and approved by an IRB for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries, including the website maintained by the U.S. National Institutes of Health, ClinicalTrials.gov.

A sponsor who wishes to conduct a clinical trial outside of the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA. The FDA will generally accept a well-designed and well-conducted foreign clinical trial not conducted under an IND if the trial was conducted in accordance with GCP requirements and the FDA is able to validate the data through an onsite inspection if deemed necessary.

Clinical trials in the United States generally are conducted in three phases, known as Phase 1, Phase 2 and Phase 3. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, tolerability and safety of the drug.

- Phase 2 clinical trials typically involve studies in a limited population of disease-affected patients to determine possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to evaluate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product approval. These trials may include comparisons with placebo and/or other comparator treatments.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical study investigators. Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the drug, findings from animal or in vitro testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information.

Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check-points based on access to certain data from the trial. Concurrent with clinical trials, companies usually complete additional animal safety studies and also must develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of LENZ's product candidates. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that LENZ's product candidates do not undergo unacceptable deterioration over their labeled shelf life.

NDA Review

Following completion of clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA, along with proposed labeling, chemistry and manufacturing information in a request for approval to market the drug for one or more specified indications. The application must include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of FDA. FDA approval of an NDA must be obtained before a drug may be marketed in the United States.

Under the Prescription Drug User Fee Act, as amended ("PDUFA"), each NDA must be accompanied by an application user fee. FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for each marketed human drug. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a qualifying small business.

The FDA reviews all submitted NDAs before it accepts them for filing to determine if they are sufficiently complete to permit a substantive review, and the FDA may request additional information rather than accepting the NDA for filing. In this event, the application must be resubmitted with the additional information and is subject to payment of additional user fees. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the NDA. Under PDUFA, the FDA has agreed to certain performance goals in the review of NDAs through a two-tiered classification system, standard review and priority review. According to PDUFA performance goals, the FDA endeavors to review applications subject to standard review within ten months, whereas the FDA's goal is to review priority review applications within six months. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs, and the review process is often extended by FDA requests for additional information or clarification.

The FDA may refer applications for novel drug products or products which present difficult questions of safety or efficacy to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions.

Before approving an NDA, the FDA typically will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. The FDA also closely analyzes the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates an NDA and conducts inspections of manufacturing facilities, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The Complete Response Letter may require additional clinical data, including the potential requirement to conduct additional pivotal Phase 3 clinical trial(s) and/or other significant and time-consuming requirements related to clinical trials, or to conduct additional preclinical studies or manufacturing changes. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than LENZ interprets the same data.

Post-Approval Requirements

Following approval of a new product, the product is subject to continuing regulation by the FDA, including, among other things, requirements relating to facility registration and drug listing monitoring and record-keeping adverse event and other periodic reporting, product sampling and distribution, and product promotion and advertising. The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such uses. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication.

After approval, if there are any changes to the approved product, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require the development of additional data or preclinical studies and clinical trials. There also are continuing user fee requirements, under which FDA assesses an annual program fee for each product identified in an approved NDA. In addition, quality control, drug manufacture, packaging, and labeling products must continue to conform to cGMP requirements after approval. LENZ relies, and expects to continue to rely, on third parties for the production of clinical and commercial quantities of its products in accordance with cGMP regulations. Manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, its manufacturer or the NDA holder, including recalls.

The FDA may also place other conditions on approvals including the requirement for a REMS, to assure the safe use of the product. If the FDA concludes that a REMS is needed, the NDA sponsor must submit a proposed REMS. The FDA will not approve the product without an approved REMS, if required. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

The FDA may withdraw approval of a product if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Corrective action could delay drug distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, suspension of the approval, complete withdrawal of the product from the market, or product recalls;
- fines, warning letters, or holds on clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications;
- suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- mandated modifications of promotional materials and labeling and the issuance of corrective information;
- issuance of safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

LENZ also must comply with the FDA's advertising and promotion requirements, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling, known as "off-label use," industry-sponsored scientific and educational activities, and promotional activities involving the internet and social media.

The FDA may also require post-approval studies and clinical trials if the FDA finds that scientific data, including information regarding related drugs, deem it appropriate. The purpose of such studies would be to assess a known serious risk or signals of serious risk related to the drug or to identify an unexpected serious risk when available data indicate the potential for a serious risk. The FDA may also require a labeling change if it becomes aware of new safety information that it believes should be included in the labeling of a drug.

Failure to comply with the applicable regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant or manufacturer to, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties.

U.S. Regulation of Drug/Device Combination Products

LENZ expects LNZ101 and LNZ100 to be subject to regulation in the United States as a combination product comprised of a drug product candidate and a device delivery system. A combination product is the combination of two or more regulated components, such as a drug/device, that are combined or mixed and produced as a single entity, packaged together in a single package or a drug or device packaged separately that according to its investigational plan or proposed labeling is intended for use only with an approved individually specified drug or device where both are required to achieve the intended use, indication or effect. If marketed individually, each component would be subject to different regulatory pathways and would require approval of independent marketing applications by the FDA – one for the device component and one for the drug component of the combination.

A combination product, however, is assigned to a center within FDA that will have primary jurisdiction over its regulation based on a determination of the combination product's primary mode of action, which is the single mode of action that provides the most important therapeutic action. To determine which FDA center or centers will review a combination product candidate submission, companies may submit a request for assignment to the FDA. Those requests may be handled formally or informally. In some cases, jurisdiction may be determined informally based on FDA experience with similar products. However, informal jurisdictional determinations are not binding on the FDA. Companies also may submit a formal Request for Designation to the FDA Office of Combination Products. The Office of Combination Products will review the request and make its jurisdictional determination within 60 days of receiving a Request for Designation.

For LENZ's current product candidates, LNZ100 and LNZ101, which are ophthalmic pharmaceutical products prefilled and packaged in a single-use eye dropper device, the mechanism of action and the pharmacological effect are attributable to the drug component of the drug-device combination product. Consistent with its communications with FDA to date and the regulatory pathway for other ophthalmic pharmaceutical products, LENZ plans to seek FDA approval of such product candidates through the NDA pathway, and it does not expect that the FDA will require a separate marketing authorization for the device component. However, each component of LENZ's product candidates will need to meet the applicable quality and manufacturing standards set by FDA, meaning the drug product must be manufactured in accordance with GMPs for drugs, and the device component must be manufactured in a manner consistent with the device GMPs set forth in FDA's Quality System Regulation, or QSR.

U.S. Patent-Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of any future product candidates, some of LENZ's U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act permits restoration of the patent term of up to five years as compensation for patent term lost during product development and FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. Application for patent extension must be filed with the USPTO within 60 days of FDA approval of the drug product even if the product cannot be commercially marketed at that time.

The patent term restoration period is generally one-half the time between the effective date of an IND or the issue date of the patent, whichever is later, and the submission date of an NDA plus the time between the submission date of an NDA or the issue date of the patent, whichever is later, and the approval of the NDA application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, LENZ may apply for restoration of patent term for its currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve an abbreviated new drug application ("ANDA"), or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Such three-year and five-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Other U.S. Regulatory Matters

Although LENZ does not expect any of its products, if approved, would be covered by any government healthcare programs or other third-party payors, it may still be subject to state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payers, including self-pay patients; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value made to physicians and other healthcare providers or marketing expenditures; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the collection, export, privacy, use, protection and security of biological materials and health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

For more information, see the section titled "*Risk Factors—Risks Related to LENZ—LENZ may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, and health information privacy and security laws, which could expose it to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.*"

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions or safe harbors, it is possible that some of LENZ's activities could be subject to challenge under one or more of such laws. The growth of its business and sales organization and its expansion outside of the United States may increase the potential of violating these laws or their internal policies and procedures. The risk of LENZ being found in violation of these or other laws and regulations is further increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to various interpretations. Any action brought against LENZ for violations of these laws or regulations, even successfully defended, could cause it to incur significant legal expenses and divert its management's attention from the operation of its business.

If LENZ's operations are found to be in violation of any of the federal, state and foreign laws described above or any other current or future fraud and abuse or other healthcare laws and regulations that apply to it, LENZ may be subject to penalties, including significant civil, criminal and administrative penalties, including damages, fines, disgorgement, individual imprisonment, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings, injunctions, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals or refusal to allow a firm to enter into supply contracts, including government contracts, and LENZ could be required to curtail or cease its operations. Any of the foregoing consequences could seriously harm LENZ's business and its financial results.

U.S. Healthcare Reform

Although LENZ does not expect any of its products, if approved, would be covered by any government healthcare programs or other third-party payors, legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. LENZ cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of its product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent regulatory approval, as well as subject LENZ to more stringent product labeling and post-marketing testing and other requirements. For more information, see the section titled "*Risk Factors—Risks Related to LENZ—LENZ may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on its business and results of operations.*"

In addition, different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may be marketed only once a reimbursement price has been agreed upon. Some of these countries may require, as condition of obtaining reimbursement or pricing approval, the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

Coverage and Reimbursement

In most foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products

for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of LENZ's products. Historically, products launched in the European Union do not follow price structures of the United States and generally prices tend to be significantly lower. For more information, see the section titled "*Risk Factors—Risks Related to LENZ—LENZ may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on its business and results of operations*."

Foreign Regulation

In addition to regulations in the United States, LENZ will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of its product candidates to the extent LENZ chooses to develop or sell any product candidates outside of the United States. The approval process varies from country to country and the time may be longer or shorter than that required to obtain FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Employees and Human Capital Resources

As of February 1, 2024, LENZ had 24 employees, 14 of whom were engaged in research and development activities. LENZ also engages contractors and consultants. None of its employees are represented by a labor union or covered under a collective bargaining agreement. LENZ has not experienced any work stoppages due to employee disputes, and it considers its relationship with its employees to be good.

LENZ's human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating its existing and new employees, advisors and consultants. The principal purposes of its equity and cash incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of LENZ by motivating such individuals to perform to the best of their abilities and achieve LENZ's objectives.

Facilities

LENZ's corporate headquarters is located in Del Mar, California, and consists of 3,577 square feet of office space pursuant to a lease that expires in March 2026.

LENZ leases all of its facilities and does not own any real property. LENZ believes that its existing facilities are adequate and suitable for its current needs and that, should it be needed, suitable additional or alternative space will be available as and when needed.

Legal Proceedings

From time to time, LENZ may be subject to legal proceedings and claims arising in the ordinary course of its business. LENZ is not currently a party to or aware of any proceedings that it believes will have, individually or in the aggregate, a material adverse effect on its business, financial condition or results of operations.

GRAPHITE'S MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of Graphite's financial condition and results of operations should be read in conjunction with Graphite's consolidated financial statements and notes thereto appearing elsewhere in this proxy statement/prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this proxy statement/prospectus, including information with respect to Graphite's plans and strategy for Graphite's business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, Graphite's actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Graphite has historically been a clinical-stage, next-generation gene editing company. In January 2023, Graphite announced a voluntary pause of its Phase 1/2 CEDAR study of nulabeglogene autogedtemcel (nula-cel), for sickle cell disease ("SCD") due to a serious adverse event in the first patient dosed, which Graphite concluded is likely related to study treatment. Nula-cel was being developed as a highly differentiated approach to treating SCD, with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

In February 2023, Graphite announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives. As a result of this decision, Graphite announced a corporate restructuring that resulted in an approximately 71.2% reduction in its workforce. Graphite also disclosed its intention to continue research activities associated with its pre-clinical non-genotoxic conditioning program, with the goal of advancing toward one or more potential development candidates. As part of the corporate restructuring, Graphite also elected not to utilize the portion of its facilities space subject to its lease agreement with Bayside Area Development for purposes of its own operations and intends to sublease the vacant space to recover a portion of the total cost.

In August 2023, Graphite entered into the LOA, pursuant to which Graphite granted Kamau an option to acquire certain of Graphite's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. Graphite also entered into an asset purchase agreement pursuant to which it transferred to Maro its pre-clinical non-genotoxic conditioning program, including technology and intellectual property, while Graphite continued to explore strategic alternatives. On September 12, 2023, Graphite entered into an amendment to the LOA with Kamau, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option.

In October 2023, Graphite entered into a sublease for a portion of the facility leased to it by Bayside Area Development, as well as an amendment to the master lease, which provided for an accelerated termination of the lease and a release of liabilities under the lease and the new sublease upon payment of a lump sum at the time of signing. Following this transaction, Graphite is no longer obligated for any rent payments under its lease with Bayside Area Development.

After a comprehensive review of strategic alternatives, including identifying and reviewing potential candidates for a strategic transaction, on November 14, 2023, Graphite entered into the Merger Agreement with LENZ, pursuant to which Merger Sub will merge with and into LENZ, with LENZ surviving as Graphite's wholly-owned subsidiary. The merger was unanimously approved by the Graphite board of directors, and the Graphite board of directors resolved to recommend approval of the Merger Agreement to the Graphite stockholders. The closing is subject to approval by Graphite's and LENZ's stockholders, as well as other customary closing conditions, including the effectiveness of the registration statement on Form S-4 of which this proxy statement/prospectus is a part and Nasdaq's approval of the listing of the shares of the Graphite common stock to be issued in connection with the transaction. If the merger is completed, the business of LENZ will continue as the business of the combined company.

Graphite's future operations are highly dependent on the success of the merger and there can be no assurances that the merger or any other strategic transaction will be successfully consummated. If the strategic review process is unsuccessful, the Graphite board of directors may decide to pursue a dissolution and liquidation.

Graphite was incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc. and was reincorporated in the State of Delaware in October 2019. In February 2020, Graphite changed its name to Integral Medicines, Inc. and in August 2020, Graphite changed its name to Graphite Bio, Inc. Research and development of Graphite's initial technology ceased at the end of 2018 and it did not have any significant operations or any research and development activities in 2019. In March 2020, Graphite identified new gene editing technology which it sought to further develop, and it licensed the related intellectual property rights from Stanford in December 2020.

Since its inception in June 2017, Graphite has devoted substantially all of its resources to performing research and development, enabling manufacturing activities in support of its product development efforts, hiring personnel, acquiring and developing its technology and product candidates, organizing and staffing the company, performing business planning, establishing its intellectual property portfolio, raising capital and providing general and administrative support for these activities. Graphite has had one product candidate that has an accepted IND, which has been transferred to a third party in connection with Graphite's execution of the LOA. All of Graphite's other product candidates were in preclinical development, and Graphite does not have any products approved for sale and has not generated any revenue from product sales. To date, Graphite has funded its operations primarily with an aggregate of $197.7 million in aggregate gross proceeds from the sales of its redeemable convertible preferred stock and the issuance of convertible notes. In June and July 2021, Graphite completed the IPO and issued 16,100,000 shares of its common stock for $17.00 a share with a total net proceeds of approximately $251.3 million, and total underwriting costs of $19.1 million and issuance costs of $3.2 million. Graphite will continue to require additional capital to fund its operations for the foreseeable future and ensure it has adequate personnel, can pay for accounting, audit, legal, and consulting services, and can pay costs associated with maintaining compliance with Nasdaq listing rules and the requirements of the SEC, director and officer liability insurance and other expenses associated with operating as a public company. Accordingly, until such time as Graphite can generate significant revenue from product sales, if ever, it expects to finance its cash needs through public or private equity or debt financings, and collaborations, strategic alliances and licensing arrangements with third parties.

Graphite has incurred significant operating losses since inception. As of September 30, 2023, Graphite had cash, cash equivalents and marketable securities of $234.0 million and an accumulated deficit of $344.1 million. Graphite expects to continue to incur substantial losses for the foreseeable future, and its transition to profitability will depend upon successful development, approval and commercialization of product candidates and upon achievement of sufficient revenues to support its cost structure. Graphite is not presently developing any product candidates, and if it resumes any such development activities, it will not generate revenue from product sales unless and until it successfully completes preclinical and clinical development and obtains regulatory approval for such product candidates. Graphite may never achieve profitability, and if it resumes development of product candidates, it will need to continue to raise additional capital.

Based upon its current operating plan, absent completing the merger, Graphite estimates that its cash, cash equivalents and investments in marketable securities as of September 30, 2023 will be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months.

Graphite expects to continue to incur significant expenses in connection with the merger or the process of evaluating other strategic alternatives if the merger is unsuccessful. There can be no assurance, however, that Graphite will be able to successfully consummate the merger or any other strategic transaction. The process of continuing to evaluate strategic transactions may be very costly, time-consuming and complex, and Graphite has incurred, and may in the future incur, significant costs related to these processes, such as legal, accounting and

advisory fees and expenses and other related charges. A considerable portion of these costs will be incurred regardless of whether the merger or any other strategic transaction is completed. Any such expenses will decrease the remaining cash available for use in Graphite's business. In addition, the merger or any other strategic business combination or other transactions that Graphite may consummate in the future could have a variety of negative consequences and Graphite may implement a course of action or consummate a transaction that yields unexpected results that adversely affects its business and decreases the remaining cash available for use in its business or the execution of its strategic plan. There can be no assurances that any particular course of action, business arrangement, transaction, or series of transactions, will be pursued, successfully consummated, lead to increased stockholder value or achieve the anticipated results. Any failure of the merger or any other strategic business combination or other transactions to achieve the anticipated results could significantly impair Graphite's ability to enter into any future strategic transactions and may significantly diminish or delay any future distributions to its stockholders.

Should Graphite resume development of product candidates, its ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more product candidates. In addition, Graphite will incur substantial research and developments costs and other expenditures to develop such product candidates, particularly as it:

- advances any product candidates through preclinical studies and clinical trials;
- manufactures supplies for its preclinical studies and clinical trials;
- seeks marketing approval for product candidates that successfully complete clinical development, if any;
- maintains compliance with applicable regulatory requirements;
- develops and scales up its capabilities to support preclinical activities and clinical trials for product candidates and commercialization of product candidates for which it obtains marketing approval, if any;
- retains key personnel to continue its go-forward operations
- operates as a public company;
- explores and executes on its strategic alternative process or a potential strategic transaction;
- implements and maintains operational, financial and management systems; and
- obtains, maintains, expands and protects its portfolio of intellectual property rights.

Graphite has relied and may in the future rely on third parties in the conduct of its preclinical studies and clinical trials and for manufacturing and supply of its product candidates if it resumes any development activities. Graphite has no internal manufacturing capabilities, and it may continue to rely on third parties for its preclinical and clinical trial materials, of which the main suppliers are single-source suppliers. Given Graphite's stage of development, it does not yet have a marketing or sales organization or commercial infrastructure. Accordingly, if Graphite obtains regulatory approval for any future product candidates, it also expects to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution.

Because of the numerous risks and uncertainties associated with product development, Graphite is unable to predict the timing or amount of increased expenses or when or if it will be able to achieve or maintain profitability. Even if Graphite is able to generate revenue from sales of any product for which it receives regulatory approval, Graphite may not become profitable. If Graphite fails to become profitable or is unable to sustain profitability on a continuing basis, it may be unable to continue its operations at planned levels and may be forced to reduce its operations.

Stanford Exclusive License Agreement and Option Agreement

In December 2020, Graphite entered into the Stanford License Agreement with Stanford, an exclusive license agreement pursuant to which Stanford granted Graphite a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

To date, pursuant to the Stanford License Agreement, Graphite has paid an upfront license fee to Stanford of $50.0 thousand and issued to Stanford and its designees an aggregate of approximately 0.6 million shares of its common stock. The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020. Graphite is obligated to pay Stanford an annual license maintenance fee on each anniversary of the effective date of the Stanford License Agreement. The annual license maintenance fee initially is $5.0 thousand and will increase to $50.0 thousand in three increments over the first seven anniversaries of the effective date of the Stanford License Agreement. After the first commercial sale of a product falling within the scope of the license (the "Licensed Product"), the annual license maintenance fee is $200.0 thousand.

In May 2021, Graphite issued 640,861 shares of its common stock in connection with the Stanford License Agreement. Subsequently, in June 2021, related to the Stanford License Agreement, Graphite repurchased 624,845 shares of its common stock from investors and founders.

Graphite is required to share with Stanford a portion of any non-royalty income Graphite receive from sublicensing the licensed patent rights or technology, subject to specified exclusions. With respect to sublicenses granted to products for the treatment of SCD, XSCID and beta thalassemia, the portion of sublicense income Graphite must share with Stanford varies by indication and declines from between a mid-teen to a second quartile double-digit percentage prior to the filing of an IND to between a high single-digit to very low double-digit percentage upon achievement of a specified clinical milestone. With respect to sublicenses granted under the licensed technology rights and not licensed patent rights, the portion of sublicense income shared with Stanford declines from between a mid-single-digit and very low double-digit percentage prior to the filing of an IND to a low single-digit percentage after filing of an IND.

Graphite is obligated to make payments to Stanford with respect to each Licensed Product of up to an aggregate of $12.8 million upon the achievement of certain development, regulatory and commercial milestones. Such amounts are payable only once upon the first occurrence of a particular milestone event with respect to each Licensed Product and only once with respect to each new indication covered by any of the Licensed Products.

Graphite also is obligated to pay Stanford low single-digit royalties based on worldwide annual net sales of any Licensed Product, subject to specified reductions. Graphite will be obligated to continue to pay royalties on a Licensed Product-by-Licensed Product and country-by-country basis, until the latest of (i) the expiration of the last valid claim under the licensed patents that covers the sale or manufacture of such Licensed Product in such country, (ii) the expiration of any period of regulatory exclusivity with respect to such Licensed Product in such country or (iii) the expiration of ten years after the first commercial sale of such Licensed Product in such country.

The term of the Stanford License Agreement expires on the later of (i) the expiration of the last patent or abandonment of the last patent application within the license patent rights or (ii) the expiration of all royalty

terms with respect to Licensed Products. The Stanford License Agreement may be terminated by Graphite at will or by Stanford if Graphite remain in breach of the Stanford License Agreement following a cure period to remedy the breach.

Graphite is required to use diligent efforts to manufacture, market and sell Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. In addition, Graphite is required to achieve specified milestones by specified dates with respect to Licensed Products for the treatment of each of SCD, XSCID and beta thalassemia. If Graphite fail to satisfy its diligence obligations, Stanford may terminate the Stanford License Agreement for its breach. For more details on the Stanford License Agreement, please see Note 5 of the Notes to Financial Statements.

In January 2021, Graphite entered into an option agreement (the "First Option Agreement"), with Stanford, pursuant to which Stanford granted Graphite the right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. Graphite may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights.

Subject to its exercise of the option under the First Option Agreement and its execution of an amendment to the Stanford License Agreement that incorporates the optioned patent rights and any optioned technology, Graphite has agreed to issue to Stanford 132,137 shares of its common stock and pay a license execution fee of $10.0 thousand. The term of the First Option Agreement expires 18 months after its effective date, subject to its right to extend such expiration date by up to an additional one year upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the Stanford License Agreement terminates. On June 23, 2022, the Company exercised its right to extend the term of the First Option Agreement for an additional year. On June 6, 2023, Graphite agreed to extend the term of the First Option Agreement for another additional year. As of September 30, 2023, Graphite had not exercised the option and no fees have been paid for the First Option Agreement.

In April 2021, Graphite entered into an option agreement (the "Second Option Agreement") with Stanford to negotiate the license for additional technologies from Stanford. Pursuant to the Second Option Agreement, Graphite agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. On April 13, 2022, Graphite entered into an amendment to the Second Option Agreement which extended the term for an additional year On March 8, 2023, Graphite terminated the Second Option Agreement without exercising the option to negotiate a license for additional technologies from Stanford.

LCGM Service Agreement

On August 30, 2021, Graphite entered into a Master Manufacturing and Service Agreement with the Laboratory for Cell & Gene Medicine ("LCGM") at Stanford ("LCGM MSA"). Pursuant to the LCGM MSA, LCGM will conduct clinical manufacturing, release testing, and product release for nula-cel in its Phase 1 clinical trial to treat SCD. During 2021, Graphite entered into various SOWs under the LCGM MSA under which Graphite received technology transfer and related services for HBB Beta-Globin Gene Variant for SCD, manufacturing engineer test runs, the exclusive use of a manufacturing suite at the LCGM facility, and Phase 1/2 clinical development and manufacturing of the HBB Variant for SCD. During the three months ended September 30, 2023, Graphite did not recognize any research and development expense in connection with the LCGM MSA. Graphite recognized $1.1 million during the nine months ended September 30, 2023. Graphite recognized $1.3 million and $2.8 million during the three and nine months ended September 30, 2022, respectively, in research and development expense in connection with the LCGM MSA. As of September 30, 2023, Graphite does not expect to incur any additional expenses associated with the LCGM MSA.

IDT License Agreement

On June 7, 2021, Graphite entered into a License Agreement (the "IDT License Agreement") with Integrated DNA Technologies, Inc. ("IDT"). Pursuant to the IDT License Agreement, IDT granted Graphite and

its affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic applications for SCD, XSCID and Gaucher disease (the "Field") and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. Graphite has also been granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

In consideration of the licenses and rights granted to Graphite under the IDT License Agreement, Graphite agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if Graphite elect to expand the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, Graphite has agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances. The acquisition of the license was accounted for as an asset acquisition and as the acquired technology did not have an alternative use, the total consideration of $3.0 million was recorded as research and development expense in the statement of operations and comprehensive loss for the December 31, 2021. During the nine months ended September 30, 2023, Graphite has not recognized any research and development expense in connection with the IDT License Agreement. There are no milestones probable as of September 30, 2023; therefore, no milestone payments have been recognized in the nine months ended September 30, 2023.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. Graphite and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, Graphite may terminate the IDT License Agreement for any reason upon written notice. As of September 30, 2023, Graphite does not expect to incur any additional expenses associated with the IDT License Agreement.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, Graphite entered into an asset purchase agreement (the "APA") with Maro pursuant to which Graphite sold to Maro, concurrently with the execution of the APA, certain assets related to Graphite's non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million as well as certain transition services to be provided by Graphite or Maro. Under the APA, Maro will also pay Graphite a sub single digit percentage cash royalty of worldwide net sales of certain products incorporating the acquired technology. The royalty term will terminate on a product-by-product and country-by-country basis on the latest of (i) the ten (10) year anniversary of the first commercial sale of such product in such country, (ii) the expiration of the last-to-expire valid claim of a transferred patent that covers such product in such country, and (iii) the expiration of regulatory exclusivity with respect to such product in such country. The APA also includes customary representations and warranties, covenants and indemnification obligations for a transaction of this nature.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the three and nine months ended September 30, 2023, Graphite recognized a loss on disposal of $0.1 million, which was recorded in other income. Graphite will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of September 30, 2023.

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, Graphite entered into an LOA with Kamau pursuant to which Graphite exclusively licensed to Kamau, and granted Kamau, an option to acquire certain intellectual property and materials related to

Graphite's nula-cel program and related pre-clinical platform assets. The option includes rights to assume the License Agreement and the First Option Agreement with Stanford, as well as the IDT License Agreement, among other agreements. Exercise of the option is contingent on Kamau raising a minimum of $10 million in funds no later than August 4, 2024 (the "Financing Milestone"), which contingency may be waived by Graphite. All rights to the intellectual property and materials will revert to Graphite if the milestone is not achieved or if Kamau elects not to exercise the option. In return for this license and option, Graphite received an equity interest in Kamau representing 20% of all outstanding shares on a fully diluted basis subject to dilution protection until the Financing Milestone. The LOA includes customary representations and warranties, limitations of liability and indemnification obligations for a transaction of this nature. The LOA automatically expires upon the first to occur of: (1) Kamau's exercise of the option, (2) Kamau's failure to exercise the option within a specified exercise period following achievement of the financing milestone, or (3) Kamau's failure to achieve the financing milestone by the pre-agreed deadline. In addition, either party has the right to terminate the LOA for the uncured material breach or insolvency of the other party, and Graphite has the right to terminate the LOA if Kamau challenges any of the patent rights that are subject to the option. As a result of the 20% equity interest, Graphite has the ability to exert significant influence over Kamau and accounts for the interest as an equity method investment. Graphite records its proportionate share of investee's equity in earnings or losses based on the most recently available financial information.

On September 12, 2023, Graphite and Kamau entered into an amendment to the LOA, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option.

The 20% equity interest in Kamau had minimal value upon execution of the LOA and Graphite did not record any amount related to the equity interest as of September 30, 2023. As of December 31, 2023, Kamau has not achieved the financial milestone and does not have the right to exercise the option.

Initial Public Offering

In June and July 2021, Graphite completed the IPO of its common stock. As part of the IPO, Graphite issued and sold 16,100,000 shares of its common stock at a public offering price of $17.00 per share. In June and July 2021, Graphite received net proceeds of approximately $251.3 million from the IPO, after deducting underwriting discounts and commissions of $19.1 million and offering costs of approximately $3.2 million.

Components of Results of Operations

Operating Expenses

Research and Development

Research and development costs consist primarily of external and internal costs incurred for its research activities and the development of its gene editing platform and associated rights which Graphite licensed in December 2020.

External costs include:

- costs incurred under agreements with third-party CROs, CMOs and other third parties that conduct preclinical and clinical activities on its behalf and manufacture its product candidates;
- costs associated with acquiring technology and intellectual property licenses that have no alternative future uses; and
- other costs associated with its research and development programs, including laboratory materials and supplies and consulting fees.

Internal costs include:

- employee-related costs, including salaries, benefits and stock-based compensation expense, for its research and development personnel; and

- facilities and other expenses incurred in connection with its research and development programs, including expenses for allocated rent and facilities maintenance, and depreciation and amortization.

Research and development costs are expensed as incurred. Since inception, Graphite has not tracked its internal indirect costs and external research and development costs by program. The intellectual property Graphite licensed in late 2020 is fundamental to its platform and Graphite did not focus on any specific programs. In the future, Graphite expects to track research and development costs on a program by program basis as Graphite identifies the specific programs and product candidates to develop.

During 2022 and 2021, Graphite was eligible for a research and development tax credit. The tax incentive was available to Graphite based on research and development activity within the United States and California during that year. These research and development tax incentives are recognized as a reduction to payroll tax expense when the right to receive has been attained and funds are collectible and are capped at $250.0 thousand per year.

The process of conducting preclinical research is costly and time-consuming. Graphite is unable to determine the duration and completion costs of its research projects or if, when and to what extent they will lead to product candidates and enter into clinical research. If Graphite resumes any development of product candidates, its future research and development costs may vary significantly based on factors such as:

- the scope, rate of progress, expense and results of its clinical trials and its discovery and preclinical development activities;
- the costs and timing of its CMC activities, including fulfilling GMP-related standards and compliance, and identifying and qualifying suppliers;
- per patient clinical trial costs;
- the number and duration of clinical trials required for approval of its product candidates;
- the number of sites included in its clinical trials;
- the countries in which the trials are conducted;
- delays in adding a sufficient number of trial sites and recruiting suitable patients to participate in its clinical trials;
- the number of patients that participate in the trials;
- patient drop-out or discontinuation rates;
- potential partial reimbursement from governmental agencies for its clinical activities;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing its product candidates;
- the phase of development of its product candidates;
- the efficacy and safety profile of its product candidates; the timing, receipt, and terms of any approvals from applicable regulatory authorities including the FDA and non-U.S. regulators;
- maintaining a continued acceptable safety profile of its product candidates following approval, if any, of its product candidates;
- significant and changing government regulation and regulatory guidance;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials; and
- the extent to which Graphite establish additional strategic collaborations or other arrangements.

General and Administrative Expenses

General and administrative expenses consist primarily of expenses related to employee-related costs, including salaries, benefits and stock-based compensation expense, for its executive, business development, finance and accounting, human resources and other administrative functions; legal services, including relating to intellectual property and corporate matters; accounting, auditing, consulting and tax services; insurance; and facility and other allocated costs not otherwise included in research and development expenses. Graphite expects to continue to incur significant general and administrative expenses for the foreseeable future as it implements its restructuring plan, pursues potential strategic alternatives and conducts its operations generally. Graphite also expects to continue to incur significant expenses associated with being a public company, including costs related to accounting, audit, legal, regulatory, and tax-related services associated with maintaining compliance with applicable Nasdaq and SEC requirements; director and officer insurance costs; and investor and public relations costs.

Restructuring and Impairment Costs

Restructuring and other charges consist primarily of costs incurred related to the corporate restructuring and the halting of research activities in the first quarter of 2023, including severance as well as lease termination, loss on disposal of property and equipment, and impairment of assets held for sale.

Other Income (Expense), Net

Interest and other income, net, consists of interest income and miscellaneous income and expenses unrelated to Graphite's core operations.

Results of Operations

Three and Nine Months Ended September 30, 2023 and 2022

Three Months Ended September 30, 2023 and 2022

The following table summarizes Graphite's statements of operations and comprehensive loss for the respective periods (in thousands):

	Three Months Ended September 30,	
	2023	2022
Operating expenses:		
Research and development	$ 2,384	$ 18,302
General and administrative	11,294	7,852
Restructuring and impairment costs	11,349	—
Total operating expenses	25,027	26,154
Loss from operations	(25,027)	(26,154)
Other income (expense), net:		
Interest income, net	2,955	1,472
Other income, net	(413)	—
Total other income (expense), net	2,542	1,472
Net loss	$(22,485)	$(24,682)
Unrealized gain (loss) on investments	176	(563)
Comprehensive loss	$(22,309)	$(25,245)

Operating Expenses

Research and Development Expenses

Research and development expenses were $2.4 million for the three months ended September 30, 2023 compared to $18.3 million for the three months ended September 30, 2022, a decrease of $15.9 million. The decrease in research and development expenses was primarily attributable to a decrease of $8.6 million in clinical trial related activities and contract manufacturing activities for Graphite's clinical trials and drug supply, a decrease of $5.0 million in personnel costs, a decrease of $1.8 million in other research and development costs primarily related to facilities costs and lease expense, and a decrease of $0.5 million related to service agreements.

General and Administrative Expenses

General and administrative expenses were $11.3 million for the three months ended September 30, 2023 compared to $7.9 million for the three months ended September 30, 2022, an increase of $3.4 million. The increase in general and administrative expenses was comprised of an increase of $2.8 million related to facilities costs and lease expense, an increase of $0.3 million in personnel-related costs, including associated stock-based compensation expense, and an increase of $0.3 million in professional service agreements.

Restructuring and Impairment Costs

Restructuring and impairment costs for the three months ended September 30, 2023 consisted primarily of costs incurred related to the corporate restructuring, including $5.3 million related to the impairment and loss on disposal of property and equipment, $4.5 million related to severance expense incurred as part of the Restructuring Plan, and $1.4 million of non-cash impairment related to the decision not to utilize the South San Francisco lease.

Other Income (Expense), Net

The other income (expense), net for the three months ended September 30, 2023 and 2022 was comprised of income received from the asset purchase agreement, as well as interest income and income received from the sublease arrangement.

Nine Months Ended September 30, 2023 and 2022

The following table summarizes Graphite's statements of operations and comprehensive loss for the respective periods (in thousands):

	Nine Months Ended September 30,	
	2023	2022
Operating expenses:		
Research and development	$ 32,136	$ 54,325
General and administrative	26,372	24,563
Restructuring and impairment costs	51,128	—
Total operating expenses	109,636	78,888
Loss from operations	(109,636)	(78,888)
Other income (expense), net:		
Interest income, net	8,387	2,435
Loss on disposal of assets	(71)	—
Other income, net	(413)	—
Total other income (expense), net	7,903	2,435
Net loss	$(101,733)	$(76,453)
Unrealized gain (loss) on investments	953	(1,596)
Comprehensive loss	$(100,780)	$(78,049)

Operating Expenses

Research and Development Expenses

Research and development expenses were $32.1 million for the nine months ended September 30, 2023 compared to $54.3 million for the nine months ended September 30, 2022, a decrease of $22.2 million. The decrease in research and development expenses was primarily attributable to a decrease of $13.6 million in clinical trial related activities and contract manufacturing activities for Graphite's clinical trials and drug supply, a $6.4 million decrease in personnel costs, a $1.2 million decrease in other research and development costs related to service agreements, and $1.0 million decrease in facilities costs and associated lease expense.

General and Administrative Expenses

General and administrative expenses were $26.4 million for the nine months ended September 30, 2023 compared to $24.6 million for the nine months ended September 30, 2022, an increase of $1.8 million. The increase in general and administrative expense was comprised of an increase of $3.4 million in facilities costs, lease expense, and depreciation and amortization expense due to an increase in the allocation of general and administrative use of facilities and $0.7 million in personnel-related costs, including associated stock-based compensation expense. This was partially offset by a decrease of $2.3 million in professional service fees and expenses.

Restructuring and Impairment Costs

Restructuring and impairment costs for the nine months ended September 30, 2023 consisted primarily of costs incurred related to the corporate restructuring, including $35.0 million of non-cash impairment related to the decision not to utilize the Bayside Area Development lease, $7.9 million related to severance expense incurred as part of the Restructuring Plan, $6.8 million related to the impairment and loss on the disposal of property and equipment, and $1.4 million of non-cash impairment related to the decision not to utilize the South San Francisco lease.

Other Income (Expense), Net

The other income (expense), net for the nine months ended September 30, 2023 and 2022 was comprised of income received from the asset purchase agreement, as well as interest income and income received from the sublease arrangement.

Years Ended December 31, 2022 and 2021

The following table summarizes Graphite's statements of operations and comprehensive loss for the respective years (in thousands):

	Year Ended December 31,	
	2022	2021
Operating expenses:		
Research and development	$ 72,787	$ 37,932
General and administrative	32,852	22,511
Total operating expenses	105,639	60,443
Loss from operations	(105,639)	(60,443)
Other income (expense), net:		
Interest income, net	4,587	24
Change in fair value of the Series A redeemable convertible preferred stock tranche liability	—	(10,341)
Total other income (expense), net	4,587	(10,317)
Net loss	$(101,052)	$(70,760)
Unrealized loss on investments	(1,048)	—
Comprehensive loss	$(102,100)	(70,760)

Operating Expenses

Research and Development Expenses

Research and development expenses were $72.8 million for the year ended December 31, 2022 compared to $37.9 million for the year ended December 31, 2021, an increase of $34.9 million. The increase in research and development expenses was primarily attributable to an increase of $15.9 million in clinical trial related activities and contract manufacturing activities for its clinical trials and drug supply, $12.7 million of personnel costs, including associated stock-based compensation expense, and $6.3 million of other research and development costs primarily related to facilities costs and lease expense associated with facilities and service agreements.

General and Administrative Expenses

General and administrative expenses were $32.9 million for the year ended December 31, 2022 compared to $22.5 million for the year ended December 31, 2021, an increase of $10.4 million. The increase in general and administrative expenses was comprised of an increase of $7.3 million in personnel-related costs, including associated stock-based compensation expense. Graphite also incurred other miscellaneous expenses costs of $1.9 million related to as well as professional expenses consisting of legal costs, accounting, financial service, and insurance costs of $1.2 million.

Other Income (Expense), Net

The other income (expense), net for the year ended December 31, 2022 comprised of interest income from the investments in marketable securities and income from money market funds. The other income (expense), net for the year ended December 31, 2021 was comprised of the change in the fair value of its Series A redeemable convertible preferred stock tranche liability of $10.3 million and income from money market funds. Investments in marketable securities were not held in the comparable period.

Liquidity and Capital Resources

Graphite has incurred losses since inception and has incurred negative cash flows from operations from inception through September 30, 2023. As of September 30, 2023, Graphite had $234.0 million of cash, cash equivalents and marketable securities and its accumulated deficit was $344.1 million. In June and July 2021, Graphite raised net proceeds of $251.3 million in its IPO, pursuant to which Graphite sold an aggregate of 16,100,000 shares of common stock.

Prior to its IPO, Graphite funded its operations primarily from the sale of redeemable convertible preferred stock and issuance of convertible promissory notes.

On July 21, 2022, Graphite filed the 2022 Shelf with the SEC in relation to the registration of up to an aggregate offering price of $300.0 million of common stock, preferred stock, debt securities, warrants and units or any combination thereof. Graphite also simultaneously entered into a Sales Agreement to provide for the offering, issuance and sale by it of up to an aggregate of $75.0 million of its common stock from time to time in "at-the-market" offerings under the 2022 Shelf and subject to the limitations thereof. Graphite will pay to the Sales Agent cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the Sales Agreement. Graphite has not issued any shares or received any proceeds from any offerings under the 2022 Shelf through December 5, 2023.

Future Funding Requirements

Historically, Graphite's primary uses of cash were to fund its operations, which consisted primarily of research and development expenditures related to its programs and, to a lesser extent, general and administrative expenditures. Graphite anticipates that it will continue to incur significant general and administrative expenses

for the foreseeable future as it pursues other strategic alternatives, advance potential product candidates, maintain its corporate infrastructure, including the costs associated with being a public company, scale its laboratory and manufacturing operations, and incur marketing costs associated with potential commercialization. Graphite is subject to all of the risks typically related to the development of new drug candidates, and Graphite may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect its business. Graphite anticipates that it will need substantial additional funding in connection with its continuing operations.

Based upon Graphite's current operating plan, Graphite believes that, absent completing the merger, its existing cash, cash equivalents and marketable securities will enable it to fund its operating expenses and capital expenditure requirements for at least the next 12 months. Until Graphite can generate sufficient revenues from the commercialization of product candidates or from collaboration agreements with third parties, if ever, Graphite expects to finance its future cash needs through public or private equity or debt financings, collaborations and other strategic alliances and licensing arrangements, or any combination of these approaches. The sale of equity or convertible debt securities may result in dilution to the Graphite stockholders and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of the Graphite common stock. Debt financings may subject Graphite to covenant limitations or restrictions on its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Graphite's ability to raise additional funds may be adversely impacted by negative global economic conditions and any disruptions to and volatility in the credit and financial markets in the United States and worldwide that have resulted and may result from inflationary pressures or other factors. There can be no assurance that Graphite will be successful in acquiring additional funding at levels sufficient to fund its operations or on terms favorable or acceptable to it. If Graphite is unable to obtain adequate financing when needed or on terms favorable or acceptable to it, it may be forced to delay, reduce the scope of or eliminate one or more of its research and development programs.

Because Graphite's resource requirements could materially change depending on the outcome of its ongoing strategic alternative review process, Graphite is unable to estimate the exact amount of its working capital requirements. In addition to factors related to the strategic alternative review process, if Graphite resumes clinical development, Graphite's future capital requirements may depend on many other factors, including:

- the timing, scope, progress, results and costs of research and development, discovery, preclinical and non-clinical studies and clinical trials for its current and future product candidates;
- the number, scope and duration of clinical trials required for regulatory approval of its current and future product candidates;
- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and comparable foreign regulatory authorities for its product candidates, including any requirement to conduct more studies or generate additional data beyond that which Graphite currently expect would be required to support a marketing application;
- the cost of manufacturing clinical and commercial supplies of its current and future product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of its product candidates for which Graphite receive marketing approval;
- its ability to maintain existing, and establish new, strategic collaborations, licensing or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- any product liability or other lawsuits related to its products;
- the revenue, if any, received from commercial sales of any product candidates for which Graphite may receive marketing approval;

- its ability to establish a commercially viable pricing structure and obtain approval for coverage and adequate reimbursement from third-party and government payers;
- the costs to establish, maintain, expand, enforce and defend the scope of its intellectual property portfolio, including the amount and timing of any payments Graphite may be required to make, or that Graphite may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing its patents or other intellectual property rights;
- expenses needed to attract, hire and retain skilled personnel; and
- the costs of operating as a public company.

A change in the outcome of any of these or other variables could significantly change the costs and timing associated with the development of its product candidates. Furthermore, its operating plans may change in the future, and Graphite may need additional funds to meet operational needs and capital requirements associated with such change.

Material Cash Requirements

The following table summarized Graphite's contractual obligations and commitments as of September 30, 2023 (in thousands):

		Payments due by Period			
	Total	Less than 1 Year	More than 1 Year and Less than 3 Years	More than 3 Years and Less than 5 Years	More than 5 Years
Operating lease commitments[1]	$86,487	$ 2,155	$ 17,513	$ 16,716	$ 50,103
Total	$86,487	$ 2,155	$ 17,513	$ 16,716	$ 50,103

(1) Amounts in the table above reflect payments due for Graphite's lease of office and lab space at 110 Haskins Way, South San Francisco, California, that expires on March 31, 2025, 201 Haskins Way, South San Francisco, California, that expires on March 31, 2025, 1400 Sierra Point Parkway, Brisbane, California, that expires on December 6, 2023, and 233 E Grand Avenue, South San Francisco, California which expires on December 31, 2024.

On January 27, 2021, Graphite entered into a new lease agreement for office and lab space in South San Francisco, California that included two office suites. The lease terms for the two office suites commenced during July and August 2021, respectively. The term of the lease is 44 months for the first office suite and 43 months for the second office suite with an option to extend the term for an additional two years on the same terms and conditions (together, the "Haskins Way Leases"). In August 2023, Graphite subleased one of its office suites in the Haskins Way Leases for 20 months starting from August 2023.

On November 10, 2021, Graphite entered into a sublease agreement for office and lab space located in Brisbane, California. The sublease expires on December 6, 2023.

On December 16, 2021, Graphite entered into a lease agreement with Bayside Area Development, LLC ("Bayside") for 85,165 square feet of office and laboratory space in South San Francisco, California (the "Nexus Lease"). The lease for the office and laboratory space commenced in April 2023. The term of the lease is 120 months with the option to extend the term up to an additional ten years.

In October 2023, Graphite entered into a sublease agreement and amendment to the original master lease with the landlord to accelerate the termination date of the Nexus Lease, and in November 2023, Graphite entered into an amendment to the original lease agreement to reassign the second suite of the Haskins Way Leases.

Except as disclosed in the table above, Graphite has no long-term debt or finance leases and no material non-cancelable purchase commitments with service providers, as Graphite has generally contracted on a

cancelable, purchase-order basis. If Graphite resumes clinical development, it will enter into contracts in the normal course of business with equipment and reagent vendors, CROs, CMOs and other third parties for clinical trials, preclinical research studies and testing and manufacturing services. These contracts are cancelable by Graphite upon prior notice. Payments due upon cancellation consist only of payments for services provided or expenses incurred, including noncancelable obligations of Graphite's service providers, up to the date of cancellation. Graphite has also acquired exclusive and non-exclusive rights to use, research, develop and offer for sale certain products and patents under license agreements. The license agreements obligate Graphite to make payments to the licensors for license fees, milestones, license maintenance fees and royalties. These payments are not included in the preceding table as the amount and timing of such payments are not known.

Cash Flows

The following table summarizes Graphite's sources and uses of cash for the periods presented (in thousands):

	Year Ended December 31,		Nine Months Ended September 30,	
	2022	2021	2023	2022
Net cash used in operating activities	$ (87,890)	$ (52,852)	$ (44,130)	$ (65,551)
Net cash used in investing activities	(241,863)	(5,740)	179,264	(255,387)
Net cash provided by financing activities	597	417,467	124	353
Net increase (decrease) in cash, cash equivalents and restricted cash	$ (329,246)	$ 358,875	$ 135,258	$ (320,585)

Nine Month Periods Ended September 30, 2023 and 2022

Cash Used in Operating Activities

Net cash used in operating activities was $44.1 million for the nine months ended September 30, 2023, which was primarily attributable to Graphite's net loss of $101.7 million, adjusted for net non-cash charges of $54.4 million and net changes in operating assets and liabilities of $3.3 million. Non-cash charges included $43.3 million of impairment expense, $8.3 million in stock-based compensation expense, and $3.9 million in non-cash lease expense, which is partially offset by $1.1 million in depreciation and amortization expenses.

Net cash used in operating activities was $65.6 million for the nine months ended September 30, 2022, which was primarily attributable to Graphite's net loss of $76.5 million and net changes in operating assets and liabilities of $4.6 million, adjusted for net noncash charges of $15.6 million. Noncash charges included $9.9 million in stock-based compensation expense, $4.5 million in noncash lease expense, and $1.2 million in depreciation and amortization expense.

Cash Used in Investing Activities

Net cash provided by investing activities was $179.3 million for the nine months ended September 30, 2023, which was primarily attributable to cash received from the maturity of investments of $217.0 million and proceeds from sale of property and equipment of $1.2 million. This was partially offset by cash used the investment in current and non-current marketable securities of $28.1 million and the purchases of tenant improvements and lab equipment at Graphite's headquarters of $10.8 million.

Net cash used in investing activities was $255.4 million for the nine months ended September 30, 2022, which was primarily attributable to the investment in current and non-current marketable securities of $339.8 million and the purchases of lab equipment for use at Graphite's headquarters of $5.6 million. This was partially offset by cash received from the maturity of investments of $90.0 million.

Cash Provided by Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2023 was $0.1 million for the nine months ended September 30, 2023, which consisted primarily of proceeds from issuance of common stock related to the employee stock purchase plan and exercise of options. This was partially offset by repurchases of unvested early exercised stock options and restricted stock awards.

Net cash provided by financing activities was $0.4 million for the nine months ended September 30, 2022, which consisted primarily of proceeds from issuance of common stock related to the employee stock purchase plan and stock grants.

Years Ended December 31, 2022 and 2021

Cash Flows from Operating Activities

Net cash used in operating activities was $88.0 million for the year ended December 31, 2022, which was primarily attributable to Graphite's net loss of $101.1 million and net changes in operating assets and liabilities of $7.2 million, adjusted for net noncash charges of $20.3 million. Net noncash charges included approximately $13.5 million in stock-based compensation expense, $6.0 million in noncash lease expense, $2.4 million in depreciation and amortization expense, which was partially offset by $1.6 million in net amortization of premiums and discounts in marketable securities. Net changes in operating assets and liabilities primarily consists of $5.5 million in operating lease liabilities, $3.2 million in prepaid expenses, offset by $1.1 million in accrued compensation and $0.4 million in accounts payable and accrued expenses.

Net cash used in operating activities was $52.9 million for the year ended December 31, 2021, which was primarily attributable to Graphite's net loss of $70.8 million and net changes in operating assets and liabilities of $2.5 million, adjusted for net noncash charges of $20.4 million. Net noncash charges included approximately $10.3 million change in the fair value of the Series A redeemable convertible preferred stock tranche liability, $7.9 million in stock-based compensation expense, $1.5 million in noncash lease expense, and $0.7 million in depreciation and amortization expense. Net changes in operating assets and liabilities primarily consists of $2.2 million in accrued compensation and $1.0 million in accounts payable and accrued expenses, offset by $3.9 million in prepaid expenses and $1.8 million in operating lease liabilities.

Cash Flows from Investing Activities

Net cash used in investing activities was $241.9 million for the year ended December 31, 2022, which was primarily attributable to investment in current and non-current marketable securities of $405.5 million and the purchase of lab equipment of $6.6 million for use at Graphite's headquarters, offset by proceeds from its investments in current and non-current marketable securities of $170.2 million.

Net cash used in investing activities was $5.7 million for the year ended December 31, 2021, which was primarily attributable to the purchase of lab equipment for use at Graphite's headquarters.

Cash Flows from Financing Activities

Net cash provided by financing activities was $0.6 million for the year ended December 31, 2022, which consisted primarily of proceeds from issuance of common stock related to stock option grants and employee stock purchase plan of $0.7 million, which was partially offset by repurchases of unvested early exercised stock grants of $0.1 million.

Net cash provided by financing activities was $417.5 million for the year ended December 31, 2021, which consisted primarily of proceeds from issuance of common stock in the IPO of $251.3 million including proceeds from the exercise of the underwriter option in July 2021, proceeds from the issuance of Series A and Series B redeemable convertible preferred stock of $165.5 million, and proceeds from issuance of common stock related to early exercised stock options, stock option grants, and employee stock purchase plan of $0.7 million.

Recently Adopted Accounting Pronouncements

For information on new accounting standards, see Note 2 to Graphite's financial statements included elsewhere in this proxy statement/prospectus.

Critical Accounting Policies and Significant Judgments and Estimates

Graphite's management's discussion and analysis of its financial condition and results of operations are based on its financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires Graphite to make estimates and judgments that affect the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in its financial statements. On an ongoing basis, Graphite evaluates its estimates and judgments, including but not limited to those related to accrued research and development costs, the fair value of redeemable convertible preferred stock, investments in marketable securities, and common stock and stock-based compensation expense, the valuation of deferred tax assets, and uncertain income tax positions. Graphite bases its estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Graphite believes that the accounting policies discussed below are critical to understanding its historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Accrued research and development expenses

As part of the process of preparing its financial statements, Graphite estimates its accrued research and development expenses at each balance sheet date. This process involves reviewing purchase orders and open contracts, communicating with its personnel to identify services that have been performed on its behalf and estimating the level of service performed and the associated costs incurred for the services when Graphite has not yet been invoiced or otherwise notified of the actual cost. The majority of its service providers invoice Graphite monthly in arrears for services performed or when contractual milestones are met; however, some require advance payments. Graphite makes estimates of its accrued expenses as of each balance sheet date in its financial statements based on facts and circumstances known to Graphite at that time. Graphite periodically confirms the accuracy of its estimates with the service providers and make adjustments as necessary. The significant estimates in its accrued research and development expenses include the costs incurred for services performed by CROs and CMOs in connection with research and development activities for which Graphite has not yet been invoiced.

Graphite bases its expenses related to research and development activities on its estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on its behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to its vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, Graphite estimates the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from its estimate, Graphite adjusts the accrual or prepaid accordingly. Non-refundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

As of the date of this proxy statement/prospectus, based upon Graphite's current operating plan, Graphite does not expect to incur accrued research and development expenses going forward. Although Graphite does not expect its estimates to be materially different from amounts incurred, its understanding of the status and timing

of services performed relative to the actual status and timing of services performed may vary and may result in Graphite reporting amounts that are too high or too low in any period. To date, there have been no material differences between its estimates of such expenses and the amounts incurred.

Stock-based compensation

Graphite measures stock options and other stock-based awards granted to its employees, directors, consultants or founders based upon their fair value on the date of the grant and recognize stock-based compensation expense over the requisite service period, which is generally the vesting period of the respective award. Graphite recognizes forfeitures as they occur.

The majority of its stock-based compensation awards are subject to either service- or performance-based vesting conditions. Graphite applies the straight-line method of expense recognition to all awards with service-based vesting and recognize stock-based compensation for performance-based awards over the service period using the accelerated attribution method to the extent achievement of the of performance condition is probable.

Graphite estimates the fair value of each stock option grant on the date of grant using the Black-Scholes option-pricing model, which uses inputs such as the fair value of its common stock, assumptions Graphite make for the volatility of its common stock, the expected term of its stock options, the risk-free interest rate for a period that approximates the expected term of its stock options and its expected dividend yield. The fair value of its common stock is used to determine the fair value of restricted stock awards.

Prior to its IPO in June 2021, there was no public market for its common stock. As a result, prior to its IPO, the estimated fair value of its common stock was determined by its board of directors as of the date of each option grant, with input from management, considering its most recently available third-party valuations of common stock and its board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. Following its IPO, the fair value of its common stock is determined based on the quoted market price of its common stock.

Leases

ASC No. 2016-02, Leases (Topic 842) requires the recognition of the right-of-use assets and related operating and finance lease liabilities on the balance sheet. For contracts entered into on or after the effective date, at the inception of a contract, Graphite assesses whether the contract is, or contains, a lease. The assessment is based on: (1) whether the contract involves the use of a distinct identified asset, (2) whether Graphite obtains the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether Graphite has the right to direct the use of the asset. At inception of a lease, Graphite allocates the consideration in the contract to each lease component based on its relative stand-alone price to determine the lease payments.

Leases are classified as either finance leases or operating leases. A lease is classified as a finance lease if any one of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset or the present value of the lease payments equals or exceeds substantially all of the fair value of the asset. A lease is classified as an operating lease if it does not meet any of these criteria.

For all leases at the lease commencement date, a right-of-use asset and a lease liability are recognized. The right-of-use asset represents the right to use the leased asset for the lease term. The lease liability represents the present value of the lease payments under the lease.

The right-of-use asset is initially measured at cost, which primarily comprises the initial amount of the lease liability, plus any initial direct costs incurred, if any, less any lease incentives received. All right-of-use assets are

reviewed for impairment. The lease liability is initially measured at the present value of the lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, Graphite's secured incremental borrowing rate for the same term as the underlying lease. For real estate leases and other operating leases, Graphite uses its secured incremental borrowing rate. For finance leases, Graphite uses the rate implicit in the lease or its secured incremental borrowing rate if the implicit lease rate cannot be determined.

Lease payments included in the measurement of the lease liability comprise the following: the fixed noncancelable lease payments, payments for optional renewal periods where it is reasonably certain the renewal period will be exercised, and payments for early termination options unless it is reasonably certain the lease will not be terminated early.

Lease cost for operating leases consists of the lease payments plus any initial direct costs, primarily brokerage commissions and is recognized on a straight-line basis over the lease term. Included in lease cost are any variable lease payments incurred in the period that are not included in the initial lease liability and lease payments incurred in the period for any leases with an initial term of 12 months or less. Lease cost for finance leases consists of the amortization of the right-of-use asset on a straight-line basis over the lease term and interest expense determined on an amortized cost basis. The lease payments are allocated between a reduction of the lease liability and interest expense.

Leasehold improvements are not unique and are retained by the lessor at the end of the lease. However, Graphite is the accounting owner of the leasehold improvements in the case of a space designed to be suitable for its specific real estate needs if it is also responsible for cost overruns.

Graphite elected to make an accounting policy of the short-term leases exemption to leases with a remaining lease term of less than 12 months as at the date of initial adoption.

Impairment of Long-Lived Assets

Graphite assesses the impairment of long-lived assets whenever events or changes in business circumstances indicate that the carrying amounts of the assets may not be fully recoverable. In the case of property and equipment and right-of-use assets for its leases, Graphite determines whether there has been an impairment by comparing the carrying value of the asset to the anticipated undiscounted net cash flows associated with the asset. If such cash flows are less than the carrying value, Graphite writes down the asset to its fair value, which may be measured as anticipated discounted net cash flows associated with the asset.

As discussed in Note 11 to Graphite's condensed financial statements included elsewhere in this proxy statement/prospectus, in connection with the Restructuring Plan, Graphite has made the decision not to utilize the Bayside Area Development premises (the "Bayside lease"). Graphite is currently seeking to sublease the vacated premises while still maintaining sufficient office and laboratory space for its normal operations. As a result, Graphite reviewed the Bayside lease for impairment as of April 2023 when it received access to the premises and will subsequently review at each reporting date or as facts and circumstances changed. As part of its impairment evaluation of the Bayside lease, Graphite separately compared the estimated undiscounted income to the net book value of the related long-term assets, which include right-of-use assets and certain property and equipment, primarily leasehold improvements. Graphite estimated sublease income using market participant assumptions, including the length of time to enter into a sublease and sublease payments, which it evaluated using sublease negotiations or agreements where applicable, current real estate trends, and market conditions. If such income exceeded the net book value of the related assets, Graphite did not record an impairment charge. Otherwise, Graphite recorded an impairment charge by reducing the net book value of the assets to their estimated fair value, which it determined by discounting the estimated sublease cash flows using the estimated borrowing rate of a market participant subtenant. Determination of these key assumptions is complex and highly judgmental.

For certain impairment charges, Graphite used the terms of active sublease negotiations or agreements to estimate sublease income. Graphite's estimate of future cash flows on the remaining floors, including the time to

enter into a sublease and the terms of sublease payments, including estimated free rent periods, is based on current real estate trends and market conditions. Accordingly, if its estimates for the time to enter the sublease and estimated free rent periods were longer (shorter), the impairment charge would be higher (lower), and if its estimates for the rental rates were lower (higher), the impairment charge would be higher (lower). Given the current office lease market rental conditions in the Bay Area, Graphite's estimates are subject to significant uncertainty. The ultimate amount of sublease income may be significantly lower or higher than the amounts used to record its impairment charges, and it may record additional impairment charges in future periods as its estimates change or when it enters into sublease negotiations or executes a sublease agreement.

Emerging Growth Company and Smaller Reporting Company Status

Graphite is an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay the adoption of new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Other exemptions and reduced reporting requirements under the JOBS Act for emerging growth companies include presentation of only two years of audited financial statements in a registration statement for an initial public offering, an exemption from the requirement to provide an auditor's report on internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended, an exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation and less extensive disclosure about its executive compensation arrangements. Graphite has elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) Graphite is no longer an emerging growth company or (ii) Graphite affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act.

However, as described in Note 2 to its financial statements included elsewhere in this proxy statement/prospectus, Graphite early adopted certain accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is permitted. As a result, its financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Graphite will remain an emerging growth company until the earliest of: (i) the last day of its first fiscal year in which Graphite has total annual gross revenues of $1.235 billion or more, (ii) December 31, 2026, (iii) the date on which Graphite is deemed to be a "large accelerated filer," under the rules of the SEC, which means the market value of equity securities that is held by non-affiliates exceeds $700.0 million as of the prior June 30th and (iv) the date on which Graphite has issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

If Graphite is a "smaller reporting company" at the time Graphite cease to be an emerging growth company, Graphite may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company Graphite may choose to present only the two most recent fiscal years of audited financial statements in its Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

LENZ'S MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of the financial condition and results of operations of LENZ Therapeutics, Inc. should be read in conjunction with its audited financial statements and the related notes and unaudited interim condensed financial statements and related notes included elsewhere in this proxy statement/prospectus. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. LENZ's actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under "Risk Factors" and elsewhere in this proxy statement/prospectus. See the section of this proxy statement/prospectus titled "Special Note Regarding Forward-Looking Statements."

Overview

LENZ is a late-stage biopharmaceutical company focused on developing and commercializing innovative therapies to improve vision. LENZ's initial focus is the treatment of presbyopia, the inevitable loss of near vision that impacts the daily lives of nearly all people over 45. In the United States, the estimated addressable population which suffers from this condition, known as presbyopes, is 128 million, almost four times the number of individuals suffering from dry eye disease and three times the number of individuals suffering from childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. LENZ believes that a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday, without the need for reading glasses, will be a highly attractive commercial product with an estimated U.S. market opportunity in excess of $3 billion. It is LENZ's goal to develop and commercialize such a product, and the company has assembled an executive team with extensive clinical and commercial experience to execute this goal and become the category leader.

LENZ's product candidates LNZ100 and LNZ101 are preservative-free, single-use, once-daily eye drops containing aceclidine and aceclidine plus brimonidine, respectively. LENZ believes its product candidates are differentiated based on rapid onset, degree and duration of near vision improvement, as well as their ability to be used across the full age range of presbyopes, from their mid-40s to well into their mid-70s, as well as the broadest refractive range. Aceclidine's pupil-selective mechanism of action was demonstrated in LENZ's clinical trials where near vision improved while avoiding blurry distance vision. Its product candidates were well-tolerated in clinical trials, and their active ingredients have favorable tolerability profiles that have been well-established empirically.

In LENZ's INSIGHT Phase 2 trial, both LNZ100 and LNZ101 achieved the primary endpoint of three-lines or greater improvement in near visual acuity without losing one or more lines in Best Corrected Distance Visual Acuity at one hour post-treatment, with a response rate of 71% and 56%, respectively, compared to 6% for vehicle. Based on the positive results in its Phase 2 trial, LENZ is currently conducting three Phase 3 clinical trials (the CLARITY or Phase 3 trials) with results expected to be announced in the second quarter of 2024. Subject to successful completion of these trials, the company plans to submit an NDA to the FDA for one or both of its product candidates in mid-2024. If approval is granted, LENZ will rigorously evaluate the results of its Phase 3 data, especially patient reported outcomes, and FDA feedback to select and commercialize the product that LENZ believes will have the greatest commercial potential, with a launch target date in mid-2025.

For more information regarding LENZ's business, see the section titled "*LENZ's Business*" beginning on page 311 of this proxy statement/prospectus.

As of September 30, 2023, LENZ had $88.2 million of cash, cash equivalents and short-term investments. Based on its current plans, LENZ believes its existing cash, cash equivalents and short-term investments, together with the proceeds from the merger and the Graphite private placement will allow the company to continue to build infrastructure and commercialize its lead product candidate, subject to successful completion of the ongoing Phase 3

trials, the NDA submission and FDA approval. LENZ does not expect to generate any revenues from product sales unless and until it successfully completes development and obtains regulatory approval for one or more of its product candidates. LENZ has incurred net losses in each year since inception, and as of September 30, 2023, it had an accumulated deficit of $71.6 million. These losses have resulted principally from costs incurred in connection with research and development activities and selling, general and administrative costs associated with LENZ's operations. LENZ expects to continue to incur significant expenses and operating losses for the foreseeable future due to the cost of research and development, including conducting clinical trials, the regulatory approval process and preparation for and the commercial launch of LNZ100 or LNZ101, subject to FDA approval, including expenses related to product sales, marketing and distribution, and additional costs associated with being a public company, including audit, legal, regulatory and tax-related services associated with maintaining compliance with an exchange listing and SEC requirements. As a result of these and other factors, it is possible that LENZ may require additional financing to fund its operations and planned growth.

To date, LENZ has financed its operations primarily through private placements of its common stock and convertible preferred stock, including the following financings during the periods presented:

- In March 2023, LENZ issued and sold an aggregate of 28,019,181 shares of its Series B preferred stock at a purchase price of $2.9801 per share for an aggregate purchase price of approximately $83.5 million.
- In October 2022, LENZ issued and sold an aggregate of 9,899,340 additional shares of its Series A Preferred Stock at a purchase price of $2.15 per share for an aggregate purchase price of approximately $21.3 million.
- In April 2022, LENZ issued and sold an aggregate of 2,950,548 shares of its Series A-1 Preferred Stock at a purchase price of $3.3892 per share for an aggregate purchase price of approximately $10.0 million.
- In April 2021, LENZ issued and sold an aggregate of 11,263,447 shares of its Series A Preferred Stock at a purchase price of $2.15 per share for an aggregate purchase price of approximately $24.2 million.

Until such time as it can generate significant revenue from sales of its product candidates, if ever, LENZ expects to finance its cash needs through equity offerings, debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, it may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. LENZ's failure to raise capital or enter into such other arrangements when needed would have a negative impact on its financial condition and could force it to delay, limit, reduce or terminate its product development or future commercialization efforts or grant rights to develop and market product candidates that it would otherwise prefer to develop and market itself.

Ji Xing License and Collaboration Agreement

In April 2022, LENZ entered into a License and Collaboration Agreement with Ji Xing Pharmaceuticals Hong Kong Limited (Ji Xing) granting Ji Xing an exclusive license (the Ji Xing License) to certain of LENZ's intellectual property rights to develop, use, import, and sell products containing LNZ100 or LNZ101 ("Products") for the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, Greater China). LENZ also granted Ji Xing (i) the right to negotiate in good faith and enter into agreements to purchase Products from LENZ for clinical and commercial uses at cost plus a negotiated percentage and (ii) the right of first negotiation to obtain a regional license from LENZ on other products LENZ might develop outside of the field of presbyopia for commercialization in Greater China.

LENZ received nonrefundable, non-creditable upfront payments totaling $15.0 million as initial consideration under the Ji Xing License. In addition, LENZ is also eligible to receive (i) up to $95.0 million in regulatory and sales milestone payments, (ii) tiered, escalating royalties in the range of 5% to 15% on net sales of

Products in Greater China by Ji Xing, its affiliates and sublicensees, and (iii) tiered, deescalating royalties in the range of 15% to 5% of sublicensing income received by Ji Xing prior to the regulatory approval of the first Product in Greater China.

The $15.0 million upfront payments allocated to that single performance obligation was recognized on execution of the Ji Xing License in the year ended December 31, 2022. No additional amounts under the Ji Xing License were received during the year ended December 31, 2022.

In connection with the Ji Xing License, RTW Investments, LP ("RTW"), a significant investor in Ji Xing, through three funds managed or advised by RTW, invested approximately $10.0 million in exchange for 2,950,548 shares of LENZ's Series A-1 Preferred Stock at a purchase price of $3.3892 per share.

Key Trends and Factors Affecting Comparability Between Periods

- The Ji Xing License was signed in April 2022, and LENZ recorded $15.0 million of revenue for the year ended December 31, 2022. LENZ does not expect to generate any revenue related to the Ji Xing License or from other sources for the year ending December 31, 2023.
- LENZ continues to build out its research and development team and expects its research and development costs will increase in 2023, relative to 2022, as a result of significant expenses related to the CLARITY trials. See the section of this proxy statement/prospectus titled "*LENZ's Business—CLARITY: Phase 3 Clinical Trials,*" for more information about the CLARITY trials.
- LENZ has built a cross-functional commercial team consisting of marketing, market access and commercial operations and will continue to strategically build its sales and its commercial infrastructure with capabilities designed to scale when necessary to support a commercial launch if approval is received. The company expects these expenses will continue to increase in 2023, as compared to 2022.
- If LENZ and Graphite complete the merger, the combined company's expenses will increase from those that LENZ incurred in prior years as a privately held company, including (i) costs to comply with the rules and regulations of the SEC and those of the Nasdaq Global Market ("Nasdaq"), (ii) legal, accounting and other professional services, (iii) insurance, (iv) investor relations activities, and (v) other administrative and professional services.

Recent Developments

The Merger

On November 14, 2023, LENZ entered into the Merger Agreement with Graphite and Generate Merger Sub, a Delaware corporation and a direct, wholly-owned subsidiary of Graphite (referred to as "merger subsidiary"), pursuant to which, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, LENZ will be merged with and into merger sub at the effective time of the merger, with LENZ continuing after the merger as the surviving company and a wholly-owned subsidiary of Graphite. At the effective time of the merger, each outstanding share of LENZ capital stock will be converted into the right to receive shares of Graphite common stock, par value $0.00001, as set forth in the merger agreement. Upon closing of the merger, the combined company will be named "LENZ Therapeutics, Inc." and will continue to be listed on the Nasdaq.

Under the exchange ratio formula in the merger agreement, immediately following the effective time of the merger, the former LENZ securityholders are expected to own approximately 65% of the outstanding shares of the combined company's common stock on a fully-diluted basis and securityholders of Graphite as of immediately prior to the effective time of the merger are expected to own approximately 35% of the outstanding shares of the combined company's common stock on a fully-diluted basis (prior to giving effect to the Graphite private placement and excluding shares reserved for future grants under the 2024 Plan and the 2024 ESPP, each described elsewhere in this proxy statement/prospectus).

Basis of Presentation

The following discussion highlights LENZ's results of operations and the principal factors that have affected its financial condition as well as its liquidity and capital resources for the periods described and provides information that management believes is relevant for an assessment and understanding of the balance sheets and statements of operations and comprehensive loss presented herein. The following discussion and analysis are based on LENZ's audited financial statements and related notes and unaudited interim condensed financial statements and related notes contained in this proxy statement/prospectus, which LENZ has prepared in accordance with GAAP. You should read the discussion and analysis together with such audited financial statements and the related notes thereto and unaudited interim condensed financial statements and related notes thereto.

Components of Statements of Operations and Comprehensive Loss

Revenue

LENZ currently has no products approved for sale, and it has not generated any revenue from product sales to date. It has generated revenue related to the Ji Xing License, and in the future may generate revenue from payments received under licenses or collaboration agreements LENZ may enter into with respect to its product candidates.

LENZ recorded $15.0 million of license revenue related to the Ji Xing License for the year ended December 31, 2022.

LENZ does not expect to generate any revenue related to the Ji Xing License or from other sources for the year ending December 31, 2023.

Operating Expenses

Research and Development

Research and development expenses, which consist primarily of costs associated with LENZ's product research and development efforts, are expensed as incurred. Research and development expenses consist primarily of: (i) employee related costs, including salaries, benefits and share-based compensation expense for employees engaged in research and development activities; (ii) third-party contract costs relating to research, formulation, manufacturing, nonclinical studies and clinical trial activities; (iii) external costs of outside consultants who assist with technology development, regulatory affairs, clinical development and quality assurance; and (iv) allocated facility-related costs. LENZ tracks research and development costs collectively for LNZ100 or LNZ101 because expenses incurred are interrelated and disaggregation would not be meaningful.

Costs for certain activities, such as manufacturing, nonclinical studies and clinical trials are generally recognized based on the evaluation of the progress of completion of specific tasks using information and data provided by LENZ vendors and collaborators. Research and development activities are central to LENZ's business.

LENZ continues to build out its research and development team and it expects its research and development costs will increase in 2023, relative to 2022, as a result of significant expenses related to its ongoing CLARITY trials. The company expects its research and development costs to continue to be high until the completion of the CLARITY trials, which it currently expects to occur in the second quarter of 2024 and to then significantly decline following conclusion of the CLARITY trials.

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of salaries and related benefits, including share-based compensation, related to LENZ's executive, finance, business development, sales and marketing, and

other corporate functions. Other general and administrative expenses include professional fees for legal, auditing, tax and business consulting services, insurance costs, intellectual property and patent costs, facility costs and travel costs. LENZ expects that selling, general and administrative expenses will increase in the future as it expands its operating activities. Additionally, following the merger, LENZ expects that the combined company will incur significant additional expenses associated with being a public company that LENZ did not incur as a privately-held company, including (i) costs to comply with the rules and regulations of the SEC and those of Nasdaq, (ii) legal, accounting and other professional services, (iii) insurance, (iv) investor relations activities, and (v) other administrative and professional services.

Other Income (Expense), Net

Other income (expense), net consists of the change in fair value of preferred stock warrants liability and interest income earned on cash, cash equivalents and short-term investments.

Provision for Income Taxes

Income tax expense consists of U.S. federal and state income taxes.

Results of Operations

Comparison of the Nine Months Ended September 30, 2022 and 2023

The following table presents the results of operations for the periods indicated (amounts in thousands, except percentages):

	Nine Months Ended September 30,			
	2022	2023	Change	% Change
	(Unaudited)			
Revenue:				
License revenue	$15,000	$ —	$(15,000)	(100)%
Total revenue	15,000	—	(15,000)	(100)%
Operating expenses:				
Research and development	13,495	39,968	26,473	196%
Selling, general and administrative	2,861	7,472	4,611	161%
Total operating expenses	16,356	47,440	31,084	190%
Loss from operations	(1,356)	(47,440)	(46,084)	3,399%
Other income/(expenses), net	18	1,164	1,146	6,367%
Net loss before income taxes	(1,338)	(46,276)	(44,938)	3,359%
Provision for income taxes	44	—	(44)	(100)%
Net loss	$ (1,382)	$(46,276)	$(44,894)	3,248%

License Revenue

During the nine months ended September 30, 2022, LENZ recognized $15.0 million of license revenue related to the Ji Xing License. This revenue was recognized upon completion of the related performance obligation. LENZ did not recognize any revenue for the nine months ended September 30, 2023.

Research and Development

Substantially all of LENZ's research and development expenses incurred for the nine months ended September 30, 2022 and 2023 were related to the development of LNZ100 and LNZ101, which were both included together in its INSIGHT and CLARITY trials.

The following table presents a detailed breakdown of LENZ's research and development expenses for the periods indicated (in thousands):

	Nine Months Ended September 30,	
	2022	2023
Contract clinical research expense	$ 7,620	$26,054
Contract manufacturing expense	4,255	5,747
Contract nonclinical research expense	480	4,117
Contract regulatory consulting expense	—	636
Employee salaries and related expense	1,051	2,702
Other expense	89	712
Total research and development	$13,495	$39,968

Research and development expenses increased $26.5 million, or 196%, from $13.5 million for the nine months ended September 30, 2022 to $40.0 million for the nine months ended September 30, 2023. The increase was primarily driven by an $18.4 million increase in contract research expense for LENZ's clinical trials, a $1.5 million increase in contract manufacturing expenses for clinical drug product manufacturing, a $3.6 million increase in contract nonclinical research expense, and a $1.7 million increase in employee salaries and related expenses. These increases were primarily related to LENZ's CLARITY trials and preparation for its expected NDA filing.

Selling, General and Administrative

Selling, general and administrative expenses increased $4.6 million, or 161%, from $2.9 million for the nine months ended September 30, 2022 to $7.5 million for the nine months ended September 30, 2023. The increase was primarily driven by a $1.4 million increase in employee salaries and related expenses due to increased headcount, a $2.1 million increase in legal and other professional services, and a $0.7 million increase in sales infrastructure and other related expenses.

Other Income (Expense), Net

Other income, net for the nine months ended September 30, 2022, was $18,000, compared to $1.2 million of income for the nine months ended September 30, 2023. The change was primarily driven by a $1.3 million increase in interest and investment income offset by change in fair value of preferred stock warrants liability of $0.1 million.

Provision for Income Taxes

During the nine months ended September 30, 2022, LENZ recognized a $44,000 provision for income taxes. The Tax Cuts and Jobs Act (the "TCJA") requires taxpayers to capitalize and amortize research and development expenditures under section 174 for tax years beginning after December 31, 2021. This rule became effective for LENZ during the year ended December 31, 2022 and resulted in the capitalization of research and development expenditures of approximately $20.0 million, which resulted in taxable income because remaining deductions and other tax attributes were not sufficient to offset license revenue recognized.

Comparison of the Years Ended December 31, 2021 and 2022

The following table presents the results of operations for the periods indicated (amounts in thousands, except percentages):

	Years Ended December 31,			
	2021	2022	Change	% Change
Revenue:				
License revenue	$ —	$ 15,000	$15,000	100%
Total revenue	—	15,000	15,000	100%
Operating expenses:				
Research and development	4,220	21,125	16,905	401%
Selling, general and administrative	2,474	4,358	1,884	76%
Total operating expenses	6,694	25,483	18,789	281%
Loss from operations	(6,694)	(10,483)	(3,789)	57%
Other income (expense), net	(869)	19	888	(102)%
Net loss before income taxes	(7,563)	(10,464)	(2,901)	38%
Provision for income taxes	—	347	347	100%
Net loss and comprehensive loss	$(7,563)	$(10,811)	$ (3,248)	43%

License Revenue

During the year ended December 31, 2022, LENZ recognized $15.0 million of license revenue related to the Ji Xing License. This revenue was recognized upon completion of the related performance obligation.

Research and Development

Substantially all of LENZ's research and development expenses incurred for the years ended December 31, 2022 and 2021 were related to the development of LNZ100 and LNZ101, which were both included together in its INSIGHT and CLARITY trials. The company does not track research and development costs separately for LNZ100 or LNZ101, because expenses incurred are interrelated and disaggregation would not be meaningful.

The following table presents a detailed breakdown of LENZ research and development expenses for the periods indicated (in thousands):

	Years Ended December 31,	
	2021	2022
Contract clinical research expense	$1,231	$11,598
Contract manufacturing expense	1,847	6,006
Contract nonclinical research expense	722	1,216
Employee salaries and related expense	306	1,810
Other expense	114	495
Total research and development	$4,220	$21,125

Research and development expenses increased $16.9 million, or 401%, from $4.2 million for the year ended December 31, 2021 to $21.1 million for the year ended December 31, 2022. The increase was primarily driven by a $10.4 million increase in contract research expense for its clinical trials, a $4.2 million increase in contract manufacturing expenses for clinical drug product manufacturing, and a $1.5 million increase in employee salaries and related expenses due to an increase in headcount.

Selling, General and Administrative

Selling, general and administrative expenses increased $1.9 million, or 76%, from $2.5 million for the year ended December 31, 2021 to $4.4 million for the year ended December 31, 2022. The increase was primarily driven by a $0.8 million increase in employee salaries and related expenses, a $0.5 million increase in legal and other professional services, and $0.4 million in facility and related and travel expenses related to increased headcount.

Other Income (Expense), Net

Other income (expense), net for the year ended December 31, 2021, was $0.9 million of expense, compared to $19,000 of income for the year ended December 31, 2022. The change was primarily driven by change in fair value of preferred stock warrants liability of $0.8 million in 2021.

Provision for Income Taxes

During the year ended December 31, 2022, LENZ recognized a $0.3 million provision for income taxes. The TCJA requires taxpayers to capitalize and amortize research and development expenditures under section 174 for tax years beginning after December 31, 2021. This rule became effective for the company during the year ended December 31, 2022 and resulted in the capitalization of research and development expenditures of approximately $20.0 million, which resulted in taxable income because remaining deductions and other tax attributes were not sufficient to offset license revenue recognized.

Liquidity and Capital Resources

Sources of Liquidity

As of September 30, 2023, LENZ had $88.2 million of cash, cash equivalents and short-term investments. Based on its current operating plans, LENZ believes its existing cash, cash equivalents and short-term investments will be sufficient to fund its planned operations into 2025. Further, based on its current operating plans, LENZ believes its existing cash, cash equivalents, and short-term investments, together with the proceeds from the merger and the Graphite private placement, will be sufficient to fund its planned operations through several anticipated value-creating milestones and through at least 2026, and will allow LENZ to continue to build infrastructure and commercialize its lead product candidate, subject to successful completion of the ongoing Phase 3 trials, NDA submission and FDA approval.

LENZ has incurred net losses in each year since inception and as of September 30, 2023, it had an accumulated deficit of $71.6 million. LENZ's net losses were $7.6 million and $10.8 million for the years ended December 31, 2021 and 2022, respectively, and $1.4 million and $46.3 million for the nine months ended September 30, 2022 and 2023, respectively. These losses have resulted principally from costs incurred in connection with research and development activities and selling, general and administrative costs associated with its operations. LENZ expects to continue to incur significant expenses and operating losses for the foreseeable future due to the cost of research and development, the regulatory approval process for either LNZ100 or LNZ101, and the commercial launch of either product, if approved.

From inception through September 30, 2023, LENZ received funding of $13.0 million from its initial seed financing, $47.0 million from the sale of Series A Convertible Preferred Stock, $10.0 million from the sale of Series A-1 Convertible Preferred Stock, and gross proceeds of $83.5 million from the sale of Series B Convertible Preferred Stock.

Funding Requirements

LENZ believes that its existing cash, cash equivalents and short-term investments will be sufficient to fund its planned operations into 2025. Further, based on its current operating plans, LENZ believes its existing cash, cash equivalents, and short-term investments, together with the proceeds from the merger and the Graphite private placement, will be sufficient to fund its planned operations through several anticipated value-creating

milestones and through at least 2026, and will allow LENZ to continue to build infrastructure and commercialize its lead product candidate, subject to successful completion of the ongoing Phase 3 trials, NDA submission and FDA approval. This belief is based on assumptions that may prove to be wrong, and the combined company could use its available capital resources sooner than expected. Changing circumstances, some of which may be beyond the combined company's control, could cause it to consume capital significantly faster than currently anticipated, and it may need to seek additional funds sooner than planned.

The combined company's future capital requirements will depend on many factors, including but not limited to:

- the results, costs, and timing of its ongoing clinical trials for LNZ100 and LNZ101;
- the costs and timing of manufacturing for its product candidates and commercial manufacturing if any product candidate is approved;
- costs associated with establishing a sales, marketing, and distribution infrastructure to commercialize any products for which the combined company may obtain marketing approval;
- the costs, timing, and outcome of regulatory review of its product candidates;
- the legal costs of obtaining, maintaining, and enforcing its patents and other intellectual property rights;
- its efforts to enhance operational systems and hire additional personnel to satisfy its obligations as a public company;
- the terms and timing of establishing and maintaining licenses and other similar arrangements;
- its ability to achieve sufficient market acceptance and adequate market share and revenue for any approved products; and
- costs associated with any products or technologies that the combined company may in-license or otherwise acquire or develop.

Historically, LENZ has funded its operations primarily through the sale and issuance of convertible preferred stock and it is possible that the combined company may require additional financing. The combined company intends to evaluate financing opportunities from time to time, and its ability to obtain financing will depend, among other things, on its development efforts, business plans, operating performance and the condition of the capital markets at the time it seeks financing. LENZ and Graphite cannot assure you that additional financing will be available to the combined company on favorable terms when required, or at all. If the combined company raises additional funds through the issuance of equity or equity-linked securities, those securities may have rights, preferences or privileges senior to the rights of the combined company's common stock, and its stockholders may experience dilution. If the combined company raises additional funds through the incurrence of indebtedness, then it may be subject to increased fixed payment obligations and could be subject to restrictive covenants, such as limitations on its ability to incur additional debt, and other operating restrictions that could adversely impact its ability to conduct its business.

Cash Flows

The following table summarizes LENZ's cash flows for the years presented (amounts in thousands):

	Years Ended December 31,		Nine Months Ended September 30,	
	2021	2022	2022	2023
			(Unaudited)	
Net cash (used in) provided by:				
Operating activities	$ (5,394)	$ (4,091)	$ 3,372	$ (39,410)
Investing activities	(9)	(37)	(34)	(44,794)
Financing activities	22,765	30,262	10,007	82,611
Net increase in cash and cash equivalents	$ 17,362	$ 26,134	$ 13,345	$ (1,593)

Net Cash Used in Operating Activities

LENZ's net cash used in operating activities primarily results from its net loss adjusted for non-cash expenses, changes in working capital components, amounts due to contract research organizations to conduct its clinical programs, manufacturing of drug product and employee-related expenditures for research and development and selling, general and administrative activities. LENZ's cash flows from operating activities will continue to be affected by spending to develop and pursue regulatory approval for either LNZ100 or LNZ101 and commercialization activities, if approval is obtained. Its cash flows will also be affected by other operating and general administrative activities, including operating as a public company.

For the year ended December 31, 2021, cash used in operating activities was $5.4 million and resulted from (i) LENZ's net loss of $7.6 million, offset by (ii) an increase in accounts payable and accrued liabilities of $1.2 million, and $1.0 million in non-cash adjustments, which was primarily related to the change in fair value of warrants and share-based compensation expense.

For the year ended December 31, 2022, cash used in operating activities was $4.1 million and resulted from (i) LENZ's net loss of $10.8 million plus a $2.1 million increase in operating assets, offset by (ii) a $8.2 million increase in accounts payable and accrued liabilities and $0.7 million in non-cash adjustments primarily related to share-based compensation expense.

For the nine months ended September 30, 2022, cash provided by operating activities was $3.4 million and resulted from (i) Lenz's net loss of $1.4 million plus a $0.9 million increase in operating assets, offset by (ii) an increase in accounts payable and accrued liabilities of $5.3 million, and $0.3 million in non-cash adjustments, which was primarily related to the change in fair value of warrants and share-based compensation expense.

For the nine months ended September 30, 2023, cash used in operating activities was $39.4 million and resulted from (i) Lenz's net loss of $46.3 million plus an increase in accounts payable and accrued liabilities of $5.9 million, and (ii) $0.4 million in net non-cash adjustments, primarily related to $0.8 million in share-based compensation expense and $0.1 million from the change in fair value of preferred stock warrants, offset by $0.5 million in amortization of premiums and discounts on marketable securities.

Net Cash Used in Investing Activities

Cash used in investing activities for the year ended December 31, 2021 was $9,000 and related to the purchase of property and equipment.

Cash used in investing activities for the year ended December 31, 2022 was $37,000 and related to the purchase of property and equipment.

For the nine months ended September 30, 2022, cash used in investing activities was $34,000 and related to the purchase of property and equipment.

For the nine months ended September 30, 2023, cash used in investing activities was $44.8 million and related primarily to the purchase of marketable securities of $46.3 million offset by proceeds from maturities of marketable securities of $1.5 million.

Net Cash Provided by Financing Activities

Cash provided by financing activities for the year ended December 31, 2021 consisted of $22.8 million in net cash proceeds from the sale of Series A Convertible Preferred Stock.

Cash provided by financing activities for the year ended December 31, 2022 includes $20.2 million in net cash proceeds from the sale of Series A Convertible Preferred Stock, $9.9 million in net cash proceeds from the sale of Series A-1 Convertible Preferred Stock, and $0.1 million in net cash proceeds from the exercise of stock options.

For the nine months ended September 30, 2022, cash provided by financing activities was $10.0 million and consisted of $9.9 million in net cash proceeds from the sale of Series A-1 Convertible Preferred Stock, and $0.1 million in net cash proceeds from the exercise of stock options.

For the nine months ended September 30, 2023, cash provided by financing activities was $82.6 million and consisted of $83.0 million in net cash proceeds from the sale of Series B Convertible Preferred Stock, and $0.2 million in net cash proceeds from the exercise of stock options offset by an increase in deferred offering costs of $0.6 million.

Material Cash Requirements from Contractual Obligations

In February 2022, LENZ entered into a lease for 2,930 square feet of office space in Del Mar, California. In March 2023, it entered into a lease amendment for a 647 square feet expansion of its office space at the same facility. The term of the lease, as amended, is forty-eight months from the original commencement date, terminating March 31, 2026, unless terminated sooner.

Rent expense is being recorded on a straight-line basis. Rent expense related to the Del Mar lease was $0.1 million for the year ended December 31, 2022 and $0.1 million for each of the nine months ended September 30, 2022 and 2023. See Note 6 to LENZ's audited financial statements and Note 5 to Lenz's unaudited interim condensed financial statements, each appearing elsewhere in this proxy statement/prospectus for details related to future lease payments.

LENZ also has contracts with various organizations to conduct research and development activities, including clinical trial organizations to manage clinical trial activities and manufacturing companies to manufacture the drug product used in the clinical trials. The scope of the services under these research and development contracts can be modified and the contracts cancelled by LENZ upon written notice. In the event of a cancellation, the company would be liable for the cost and expenses incurred to date as well as any close out costs of the service arrangement.

Off-Balance Sheet Arrangements

Since its inception, LENZ did not have, and it does not currently have, any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Estimates

LENZ management's discussion and analysis of the financial condition and results of operations is based on LENZ financial statements, which have been prepared in accordance with GAAP. The preparation of its financial statements requires LENZ to make certain estimates, judgements and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements, as well as the reported amounts of revenues and expenses during the periods presented. LENZ believes that the estimates, judgments and assumptions are reasonable based upon information available to it at the time that these estimates, judgments and assumptions are made. To the extent there are material differences between these estimates, judgments or assumptions and actual results, LENZ's financial statements will be affected. Historically, revisions to LENZ estimates have not resulted in a material change to its financial statements.

While its significant accounting policies are described in more detail in the notes to its financial statements appearing elsewhere in this proxy statement/prospectus, LENZ believes the following accounting policies to be most critical to the judgments and estimates used in the preparation of its financial statements.

Prepaid and Accrued Research and Development Expenses

As part of the process of preparing its financial statements, LENZ is required to estimate its prepaid and accrued research and development expenses. This process involves reviewing open contracts and purchase

orders, communicating with its personnel to identify services that have been performed on LENZ's behalf and estimating the level of service performed and the associated cost incurred for the service when LENZ has not yet been invoiced or otherwise notified of the actual cost. LENZ makes estimates of its prepaid and accrued research and development expenses as of each balance sheet date in its financial statements based on facts and circumstances known to LENZ at the time.

Although LENZ does not expect its estimates to be materially different from amounts actually incurred, if its estimates of the status and timing of services performed differ from the actual status and timing of services performed, LENZ may report amounts that are too high or too low in any particular period. To date, there have been no material differences between its estimates and amounts actually incurred.

Preferred Stock Warrants Liability

LENZ has freestanding warrants to purchase shares of its Series A convertible preferred stock, referred to herein as the Series A Warrants. Upon certain change in control events that are outside of LENZ's control, including liquidation, sale or transfer of control, holders of the preferred stock can cause redemption of such warrants. The Series A Warrants are revalued at each subsequent balance sheet date, with fair value changes recognized as increases or reductions to other income (expense), net in the accompanying statements of operations. See Note 3 to LENZ's audited financial statements and unaudited interim condensed financial statements, each included elsewhere in this proxy statement/prospectus for information concerning certain of the specific assumptions LENZ used in determining the value of the Series A Warrants at each reporting period.

Stock-Based Compensation Expense

Stock-based compensation expense represents the cost of the grant date fair value of equity awards recognized over the requisite service period of the awards (usually the vesting period) on a straight-line basis. LENZ estimates the fair value of equity awards using the Black-Scholes option pricing model and recognize forfeitures as they occur. Estimating the fair value of equity awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of variables, including the risk-free interest rate, the expected stock price volatility, the expected term of stock options, the expected dividend yield and the fair value of the underlying common stock on the date of grant. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop. See Note 9 to LENZ's audited financial statements and unaudited interim condensed financial statements, each included elsewhere in this proxy statement/prospectus for information concerning certain of the specific assumptions LENZ used in applying the Black-Scholes option pricing model to determine the estimated fair value of its stock options granted, if any, during 2021 and 2022 and the nine months ended September 30, 2022 and 2023.

Common Stock Valuations

LENZ is required to estimate the fair value of LENZ the common stock underlying its equity awards when performing fair value calculations. The fair value of LENZ the common stock underlying its equity awards was determined on the grant date by the LENZ board of directors considering its most recently available third-party valuations of LENZ common stock and the LENZ board of directors' assessment of additional objective and subjective factors that it believed were relevant, and factors that may have changed from the date of the most recent valuation through the date of the grant. All LENZ options are intended to be granted with an exercise price per share no less than the fair value per share of LENZ common stock underlying those LENZ options on the date of grant, based on the information known to LENZ on the date of grant. In the absence of a public trading market for the LENZ common stock, on each grant date LENZ develops an estimate of the fair value of the LENZ common stock in order to determine an exercise price for the option grants.

The various objective and subjective factors the LENZ board of directors considered, along with input from management, to determine the fair value of the LENZ common stock, included:

- valuations of the LENZ common stock performed by independent third-party valuation specialists;
- its stage of development and business strategy, including the status of research and development efforts of its platforms, programs and product candidates, and the material risks related to its business and industry;
- its results of operations and financial position, including its levels of available capital resources;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- the lack of marketability of the LENZ its common stock as a private company;
- the prices of its convertible preferred stock sold to investors in arm's length transactions and the rights, preferences, and privileges of its convertible preferred stock relative to those of the LENZ common stock;
- the likelihood of achieving a liquidity event for the holders of LENZ common stock, such as an initial public offering or a sale of LENZ, given prevailing market conditions;
- trends and developments in its industry; and
- external market conditions affecting the life sciences and biotechnology industry sectors.

To date, determinations of the fair value of LENZ common stock have included the consideration by the LENZ board of directors of valuations prepared by an independent third-party valuation specialist using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide: Valuation of Privately Held Company Equity Securities Issued as Compensation (the Practice Aid).

The Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to the LENZ common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of LENZ's future operations, discounting to the present value with an appropriate risk adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics. Each valuation methodology was considered in LENZ's valuations.

The Practice Aid also identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, the company's board of directors considered the following methods:

- *Probability-weighted expected return method ("PWERM")*. The PWERM is a scenario-based analysis that estimates the fair value of common stock based upon an analysis of future values for the business, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible forecasted outcomes as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at a non-marketable indication of value for the common stock.
- *Option Pricing Method ("OPM")*. Under the OPM, shares are valued by creating a series of call options, representing the present value of the expected future returns to the stockholders, with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.

- *Hybrid Return Method*. The hybrid return method is a blended approach using aspects of both the PWERM and OPM, in which the equity value in one of the scenarios is calculated using an OPM.

LENZ has generally estimated the enterprise value of its business using a market approach. For each of the valuations conducted as of October 30, 2020, May 1, 2022 and October 31, 2022, LENZ used the precedent transaction method (one of the three general methodologies of the market approach) to determine enterprise value. The precedent transaction method considers the sale price of shares in a recent financing and then back-solves using an option pricing model that gives consideration to its capitalization structure and rights of the preferred and common stockholders as well as an assumption for a discount for lack of marketability ("DLOM"). For the March 6, 2023, June 30, 2023, and September 6, 2023 valuations, LENZ examined two scenarios to estimate enterprise value: (1) the "IPO Scenario," which represents the future value of the LENZ common stock upon an initial public offering, based on certain assumptions, and then risk-adjusts to estimate the present value of LENZ common stock excluding any DLOM, and (2) the "Stay Private Scenario," in which LENZ would remain an independent and private company and for which it used the precedent transaction method including a DLOM. LENZ then probability weighted the valuations for the IPO Scenario and the Stay Private Scenario to estimate enterprise value.

Given the uncertainty associated with both the timing and type of any future exit scenario, and based on LENZ's stage of development and other relevant factors, for the valuations conducted as of October 30, 2020, May 1, 2022, and October 31, 2022, LENZ concluded that the OPM was most appropriate for allocating enterprise value. LENZ believed the OPM was the most appropriate given the expectation of various potential liquidity outcomes and the difficulty of selecting and supporting appropriate enterprise values given LENZ's early stage of development. Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the LENZ preferred stock and LENZ common stock are inferred by analyzing these options. For the valuations conducted as of March 6, 2023, June 30, 2023, and September 6, 2023, LENZ determined to allocate enterprise value using the hybrid return method, which is a hybrid between PWERM and OPM and estimates the probability weighted value across multiple scenarios but uses the OPM to estimate the allocation of value within one or more of those scenarios. The hybrid method is useful when certain discrete future outcomes can be predicted, but also accounts for uncertainty regarding the timing or likelihood of specific alternative exit events.

The assumptions underlying these valuations represented management's best estimates, which involved inherent uncertainties and the application of management's judgment. As a result, if LENZ had used significantly different assumptions or estimates, the fair value of LENZ common stock and its stock-based compensation expense could have been materially different. Following the closing of the merger, the combined company's board of directors will determine the fair value of its common stock based on its closing price as reported on the date of grant on the primary stock exchange on which its common stock is traded.

Other Company Information

Jumpstart Our Business Startups Act ("JOBS Act")

The combined company will be an emerging growth company, as defined in the JOBS Act, and it may remain an emerging growth company for up to five years following the initial public offering of Graphite's common stock. For so long as the combined company remains an emerging growth company, it is permitted and intends to rely on certain exemptions from various public company disclosure and reporting requirements, including not being required to have its internal control over financial reporting audited by its independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. In particular, in this proxy statement/prospectus, LENZ has provided only two years of audited financial statements and has not included all of the executive compensation-related

information that would be required if LENZ were not an emerging growth company. Accordingly, the information contained herein may not be comparable with the information you receive from other public companies in which you hold stock.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Graphite has elected to use this extended transition period for complying with certain or new or revised accounting standards until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the closing of its initial public offering, (b) in which it has total annual gross revenue of at least $1.235 billion, or (c) in which it is deemed to be a large accelerated filer, which means the market value of its common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, (ii) the date on which it has issued more than $1.0 billion in non-convertible debt during the prior three-year period, or (iii) if it affirmatively and irrevocably opts out of the extended transition period provided by the JOBS Act.

The combined company will also be a "smaller reporting company" because the market value of Graphite's stock held by non-affiliates was less than $700 million as of June 30, 2023 and its annual revenue was less than $100 million during the fiscal year ended December 31, 2022. The combined company may continue to be a smaller reporting company after the merger in any given year if either (i) the market value of its stock held by non-affiliates is less than $250 million as of June 30 in the most recently completed fiscal year or (ii) its annual revenue is less than $100 million during the most recently completed fiscal year and the market value of its stock held by non-affiliates is less than $700 million as of June 30 in the most recently completed fiscal year. If the combined company is a smaller reporting company at the time it ceases to be an emerging growth company, it may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company it may choose to present only the two most recent fiscal years of audited financial statements in the combined company's Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Recent Accounting Pronouncements

See Note 2 to LENZ's audited financial statements and unaudited interim condensed financial statements, each included elsewhere in this proxy statement/prospectus for a discussion of recent accounting pronouncements.

MANAGEMENT FOLLOWING THE MERGER

Executive Officers and Directors of the Combined Company Following the Merger

The combined company's board of directors will initially be fixed at seven members, consisting of (i) two (2) directors designated by Graphite, namely Kimberlee C. Drapkin and Jeff George, and (ii) five (5) current members of the LENZ board of directors, namely Evert Schimmelpennink, Frederic Guerard, Pharm.D., James McCollum, Shelley Thunen and Zach Scheiner, Ph.D. The staggered structure of the current Graphite board of directors will remain in place for the combined company following the completion of the merger.

The following table lists the names and ages, as of February 1, 2024, and positions of the individuals who are expected to serve as executive officers and directors of the combined company upon completion of the merger:

Name	Age	Position(s)
Executive Officers		
Evert Schimmelpennink	52	President, Chief Executive Officer, Secretary and Director
Shawn Olsson	41	Chief Commercial Officer
Marc Odrich, M.D.	65	Chief Medical Officer
Non-Employee Directors		
Jeff George	50	Director
Kimberlee C. Drapkin	55	Director
Frederic Guerard, Pharm.D.	51	Director
James McCollum	69	Director
Shelley Thunen	71	Director
Zach Scheiner, Ph.D.	47	Director

Executive Officers

Evert Schimmelpennink has served as LENZ's President and Chief Executive Officer and a member of the LENZ board of directors since March 2021. Previously, from August 2017 to October 2020, Mr. Schimmelpennink served as President and Chief Executive Officer and a member of the board of directors of publicly listed Pfenex, Inc., a biopharmaceutical company, until its acquisition by Ligand Pharmaceuticals Inc. (Nasdaq: LGND) in late 2020. From November 2019 until its sale, Mr. Schimmelpennink also served as the acting Principal Financial Officer and Principal Accounting Officer of Pfenex Inc. From October 2015 to August 2017, Mr. Schimmelpennink served as Chief Executive Officer of Alvotech, a biopharmaceutical company. Prior to that, Mr. Schimmelpennink held senior positions at Pfizer Inc. (NYSE: PFE) and Hospira, Inc. within their global specialty injectables businesses, as well as Synthon BV. Mr. Schimmelpennink currently serves on the board of directors of iBio, Inc. (NYSE: IBIO) and Pipeline Therapeutics. Mr. Schimmelpennink holds a M.Sc. in Bioprocess Engineering from the University of Wageningen in the Netherlands and a business degree from the Arnhem Business School.

LENZ believes Mr. Schimmelpennink is qualified to serve on the combined company's board of directors because of his knowledge of LENZ's business and his extensive leadership and operational experience within the pharmaceutical and biotech industries.

Shawn Olsson has served as LENZ's Chief Commercial Officer since April 2021. Previously, from March 2018 to April 2021, Mr. Olsson served as Vice President of North American Marketing and Global Portfolio and Vice President of North American Marketing at Xellia Pharmaceuticals, a pharmaceuticals and life sciences company. From September 2015 to March 2018, Mr. Olsson served as Director, Global Sterile Injectables on Market Strategy Lead and Commercial Lead, Opioids and Syringe Technology Portfolio at Pfizer (NYSE: PFE), a multinational pharmaceutical and biotechnology company. Mr. Olsson holds a B.S. in Mechanical Engineering from Purdue University, a M.S. in Mechanical Engineering from University of Michigan and an M.B.A. in Strategic Management and Finance from University of Chicago.

Marc Odrich, M.D. has served as LENZ's Chief Medical Officer since July 2021 and provided consulting services to LENZ from March 2018 to July 2021. Since June 2017, Dr. Odrich has served as an Associate Professor of Ophthalmology at the University of Virginia, where he specializes in Refractive Surgery and Ocular Surface Disease. Since March 2016, Dr. Odrich has served as a consultant to TearSolutions, Inc., an early stage clinical ophthalmology company specializing in Ocular Surface Disease. Dr. Odrich is also a consultant to Johnson & Johnson Vision Care and is a member of the board of directors of Epion Therapeutics. Dr. Odrich previously served as the Medical Director for Visx Incorporated, a developer of technology and systems for laser vision correction, where he led the clinical team in bringing the excimer laser into commercialization worldwide. Dr. Odrich has been involved with group, private and academic ophthalmic practices since 1990. Dr. Odrich holds a B.A. in Ancient History from Columbia University in the City of New York and an M.D. from Columbia University's College of Physicians and Surgeons. Dr. Odrich completed an internship in internal medicine at Yale's Danbury Hospital before pursuing his residency at Columbia University's Harkness Eye Institute. Dr. Odrich then completed a two-year fellowship focused on cornea and external disease at Harvard's Massachusetts Eye and Ear Infirmary.

Non-Employee Directors

Jeff George will serve as a member of the combined company's board of directors upon consummation of the merger. Since January 2017, Mr. George has served as the Managing Partner of Maytal Capital, a healthcare-focused private equity investment and advisory firm he founded. Between 2008 and 2016, Mr. George served on the Executive Committee of Novartis Group AG, a pharmaceutical company, first as Division Head and CEO of Sandoz, Novartis' generic pharmaceuticals and biosimilars subsidiary, and then as Division Head and CEO of Alcon, Novartis' then eye care subsidiary. Mr. George previously headed Emerging Markets for the Middle East, Africa, Southeast Asia and CIS at Novartis Pharmaceuticals and served as Vice President and Head of Western and Eastern Europe for Novartis Vaccines. Prior to this, Mr. George held leadership roles at Gap Inc. and McKinsey & Co. Mr. George serves on the boards of directors of Amneal Pharmaceuticals, Inc. (Nasdaq: AMRX), a generics and specialty pharmaceuticals company, 908 Devices (Nasdaq: MASS), a pioneer in life science diagnostics, Dorian Therapeutics, a cellular senescence biotech spun out of Stanford University, and MAPS PBC, a late-stage CNS-focused private biopharma company where he serves as chairman of the board. Mr. George also currently serves on several non-profit boards and previously served as the Chairman of Education Opens Doors. Mr. George has also served as an Operating Partner at Revival Healthcare Capital, a medical device-focused private equity firm. Mr. George holds an M.B.A. from Harvard Business School, an M.A. from Johns Hopkins University's School of Advanced International Studies, and a B.A. from Carleton College.

LENZ believes Mr. George is qualified to serve on the combined company's board of directors because of his extensive industry background and experience in the life sciences industry.

Kimberlee C. Drapkin has served as Graphite's president and chief executive officer since August 2023 and as a director of Graphite since July 2023. Ms. Drapkin has over 25 years of experience working with private and publicly traded biotechnology and pharmaceutical companies, including building and leading finance functions, raising capital, and leading strategic financial planning. Most recently, Ms. Drapkin was the Chief Financial Officer at Jounce Therapeutics, Inc., a position she held from August 2015 until the company's acquisition by Concentra Biosciences, LLC in May 2023, playing a key role in building Jounce's financial infrastructure. Prior to joining Jounce, Ms. Drapkin owned a financial consulting firm where she served as the interim chief financial officer for numerous early-stage biotechnology companies. Previously, she was the Chief Financial Officer at EPIX Pharmaceuticals, Inc. and also spent ten years in roles of increasing responsibility within the finance organization at Millennium Pharmaceuticals, Inc. Her career began in the technology and life sciences practice at PriceWaterhouseCoopers LLP. Ms. Drapkin served as a member of the board of directors of Proteostasis Therapeutics, Inc. until the completion of the merger of Proteostasis and Yumanity Therapeutics, Inc., at which point she became a member of the Yumanity board of directors. Ms. Drapkin then served on the board of directors of Yumanity through the completion of its reverse merger with Kineta, Inc. She currently serves on the

board of directors of Acumen Pharmaceuticals, Inc. (Nasdaq: ABOS), Imugene Limited (ASX: IMU) and Kineta, Inc. (Nasdaq: KA), where she is a member of audit committee at all three companies. Ms. Drapkin holds a B.S. in accounting from Babson College.

LENZ believes Ms. Drapkin is qualified to serve on the combined company's board of directors because of her role as Graphite's chief executive officer prior to the merger.

Frederic Guerard, Pharm.D. has served as a member of the LENZ board of directors since September 2021. Since October 2023, Dr. Guerard has served as Chief Executive Officer of Opthea Limited (Nasdaq: OPT; ASX: OPT), a biopharmaceutical company. Dr. Guerard served as the President and Chief Executive Officer of Graybug Vision, Inc. from February 2019 until March 2023. From 1999 to February 2019, Dr. Guerard held key leadership roles at Novartis AG, a multinational pharmaceutical company, including Worldwide Business Franchise Head of Ophthalmology from April 2016 to February 2019, Global Franchise Head of Pharmaceuticals at Alcon Laboratories, a Novartis company, from May 2015 to April 2016, Managing Director of the United Kingdom and Ireland from July 2012 to April 2015, and Country President and Managing Director of Australia and New Zealand from April 2009 to July 2012, among others. Dr. Guerard currently serves on the board of directors of CalciMedica, Inc. (Nasdaq: CALC). Dr. Guerard holds a Pharm.D. and a Master of Biological and Medical Sciences from the University of Rouen, France and a Master of Marketing from HEC Paris.

LENZ believes Dr. Guerard is qualified to serve on the combined company's board of directors because of his extensive drug development experience and his experience serving in various leadership positions in biotechnology companies.

James McCollum co-founded LENZ and has served on the LENZ board of directors since July 2013. From September 2016 to March 2021, Mr. McCollum served as LENZ's President and Chief Executive Officer. From September 2014 to September 2016, Mr. McCollum served as President and Chief Executive Officer of Eye Therapies, LLC, an ocular pharmaceutical company co-founded by Mr. McCollum. Previously, Mr. McCollum served as the President and Chief Executive Officer of Restoration Robotics, a medical robotics company, President and Chief Executive Officer of Vision Membrane Technologies, an intraocular lens medical device company, and President and Chief Executive Officer of Argus Biomedical, an artificial cornea medical device company. Earlier in his career, Mr. McCollum held the position of Senior Vice President of Worldwide Marketing and Sales at VISX, Incorporated, a developer of technology and systems for laser vision correction. Mr. McCollum holds a B.A. in Business from North Carolina State University.

LENZ believes Mr. McCollum is qualified to serve on the combined company's board of directors because of his deep knowledge of LENZ's business and strategy, his extensive executive leadership and operational experience.

Shelley Thunen has served as a member of the LENZ board of directors since November 2023. Since February 2017, Ms. Thunen has served as Chief Financial Officer of RxSight, Inc. (Nasdaq: RXST), an ophthalmic medical technology company, and served as RxSight's Chief Administrative Officer from January 2016 to February 2017. From January 2013 to October 2015, Ms. Thunen served as the Chief Financial Officer of Endologix, Inc. (Nasdaq: ELGX), a medical device company. From August 2010 to December 2012, Ms. Thunen served as Associate General Manager of Alcon LenSx, Inc., a medical device company. Prior to Alcon's (NYSE: ALC) acquisition of LenSx, Inc. in August 2010, Ms. Thunen served as a board member and chair of the audit committee from April 2008 to August 2010, as well as Chief Financial Officer and Vice President, Operations from November 2009 to August 2010. Ms. Thunen joined IntraLase Corp. (Nasdaq: ILSE), a laser technology company, in May 2001 and was its Chief Financial Officer and later Executive Vice President & Chief Financial Officer until its acquisition by Advanced Medical Optics, Inc. (NYSE: EYE) in April 2007. Ms. Thunen serves on the board of directors and as audit committee chair of AEON Biopharma, Inc. (NYSE: AEON). Ms. Thunen holds a B.A. in economics and an M.B.A. from the University of California, Irvine.

LENZ believes Ms. Thunen is qualified to serve on the combined company's board of directors because of her extensive experience in the biotechnology industry and her leadership experience as a senior financial executive.

Zach Scheiner, Ph.D. has served as a member of the LENZ board of directors since October 2020. Dr. Scheiner joined RA Capital Management, L.P., an investment manager, in April 2015 as an associate, became an analyst in April 2017, and has been a principal since December 2017. Prior to joining RA Capital, Dr. Scheiner was a Science Officer at the California Institute for Regenerative Medicine (CIRM), where he worked from September 2008 to March 2015. Dr. Scheiner currently serves on the board of directors of Nkarta Therapeutics, Inc. (Nasdaq: NKTX) and several private biotechnology companies. Dr. Scheiner holds a B.S. in Molecular Biophysics and Biochemistry from Yale University and a Ph.D. in Neurobiology and Behavior from the University of Washington.

LENZ believes Dr. Scheiner is qualified to serve on the combined company's board of directors because of his experience in the life sciences industry and his investing experience.

Election of Officers

LENZ's executive officers are appointed by, and serve at the discretion of, the LENZ board of directors. There are no family relationships among any of LENZ's directors or executive officers.

Board of Directors of the Combined Company Following the Merger

The Graphite board of directors currently consists of ten directors divided into three staggered classes, with one class to be elected at each annual meeting to serve for a three-year term. The classified structure of the combined company's board of directors will remain in place for the combined company following the completion of the merger. It is anticipated that the incoming directors will be appointed to applicable vacant director seats of the combined company's board of directors following the resignation of the current Graphite board members.

In accordance with the terms of the combined company's certificate of incorporation and bylaws, the combined company's board of directors is divided into three classes, Class I, Class II and Class III, with members of each class serving staggered three-year terms. The members of the classes are divided as follows:

- the Class I directors are Frederic Guerard, Pharm.D and James McCollum, and their terms will expire at the annual meeting of stockholders to be held in 2025;
- the Class II directors are Jeff George, Shelley Thunen, and Evert Schimmelpennink, and their terms will expire at the annual meeting of stockholders to be held in 2026; and
- the Class III directors are Kimberlee C. Drapkin and Zach Scheiner, Ph.D., and their terms will expire at the annual meeting of stockholders to be held in 2027.

There are no family relationships among any of the proposed combined company's directors and officers.

Committees of the Combined Company's Board of Directors

In connection with the completion of the merger, the standing committees of the board of directors of the combined company will continue to be the following: audit committee, compensation committee and a nominating and corporate governance committee, and each will continue to operate pursuant to a charter, which is expected to be amended and restated by the combined company's board of directors in connection with the completion of the merger. The combined company's board of directors may establish other committees from time to time to assist the board of directors.

Audit Committee

Following completion of the merger, the combined company's audit committee will, among other things:

- select, retain, compensate, evaluate, oversee and, where appropriate, terminate the combined company's independent registered public accounting firm;
- review and approve the scope and plans for the audits and the audit fees and approve all non-audit and tax services to be performed by the independent auditor;
- evaluate the independence and qualifications of the combined company's independent registered public accounting firm;
- review the combined company's financial statements, and discuss with management and the combined company's independent registered public accounting firm the results of the annual audit and the quarterly reviews;
- review and discuss with management and the combined company's independent registered public accounting firm the quality and adequacy of the combined company's internal controls and the combined company's disclosure controls and procedures;
- discuss with management the combined company's procedures regarding the presentation of the combined company's financial information, and review earnings press releases and guidance;
- oversee the design, implementation and performance of the combined company's internal audit function, if any;
- set hiring policies with regard to the hiring of employees and former employees of the combined company's independent auditor and oversee compliance with such policies;
- review, approve and monitor related party transactions;
- adopt and oversee procedures to address complaints regarding accounting, internal accounting controls and auditing matters, including confidential, anonymous submissions by the combined company's employees of concerns regarding questionable accounting or auditing matters;
- review and discuss with management and the combined company's independent auditor the adequacy and effectiveness of the combined company's legal, regulatory and ethical compliance programs; and
- review and discuss with management and the combined company's independent auditor the combined company's guidelines and policies to identify, monitor and address enterprise risks, including the oversight of risks from cybersecurity threats.

Following the consummation of the merger, the members of the audit committee are expected to be Frederic Guerard, Shelley Thunen, and Zach Scheiner. Shelley Thunen is expected to be the chair of the audit committee and is a financial expert under the rules of the SEC. To qualify as independent to serve on the combined company's audit committee, listing standards of Nasdaq and the applicable SEC rules require that a director not accept any consulting, advisory or other compensatory fee from the combined company, other than for service as a director, or be an affiliated person of the combined company. Graphite and LENZ believe that, following the completion of the merger, the composition of the audit committee will comply with the applicable requirements of the rules and regulations of Nasdaq and the SEC.

Compensation Committee

Following completion of the merger, the combined company's compensation committee will, among other things:

- review, approve or make recommendations to the combined company's board of directors regarding the compensation for the combined company's executive officers, including the combined company's chief executive officer;
- review, approve and administer the combined company's employee benefit and equity incentive plans;

- establish and review the compensation plans and programs of the combined company's employees, and ensure that they are consistent with the combined company's general compensation strategy;
- determine or make recommendations to the combined company's board of directors regarding non-employee director compensation;
- monitor compliance with any stock ownership guidelines; and
- approve or make recommendations to the combined company's board of directors regarding the creation or revision of any clawback policy.

Following the consummation of the merger, the members of the compensation committee are expected to be Frederic Guerard, Kimberlee Drapkin, and Shelley Thunen. Frederic Guerard is expected to be the chair of the compensation committee. Each member of the combined company's compensation committee is expected to be a "non-employee" director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act and independent within the meaning of the independent director guidelines of Nasdaq. Graphite and LENZ believe that, following the completion of the merger, the composition of the compensation committee will comply with the applicable requirements of the rules and regulations of Nasdaq.

Nominating and Corporate Governance Committee

Following completion of the merger, the combined company's nominating and corporate governance committee will, among other things:

- review and assess and make recommendations to the combined company's board of directors regarding desired qualifications, expertise and characteristics sought of board members;
- identify, evaluate, select or make recommendations to the combined company's board of directors regarding nominees for election to the combined company's board of directors;
- develop policies and procedures for considering stockholder nominees for election to the combined company's board of directors;
- review the combined company's succession planning process for its chief executive officer and any other members of its executive management team;
- review and make recommendations to the combined company's board of directors regarding the composition, organization and governance of the combined company's board of directors and its committees;
- review and make recommendations to the combined company's board of directors regarding the combined company's corporate governance guidelines and corporate governance framework;
- oversee director orientation for new directors and continuing education for the combined company's directors;
- oversee the evaluation of the performance of the combined company's board of directors and its committees;
- review and monitor compliance with the combined company's code of business conduct and ethics, and review conflicts of interest of the combined company's board members and officers other than related party transactions reviewed by the combined company's audit committee; and
- administer policies and procedures for communications with the non-management members of the combined company's board of directors.

Following the consummation of the merger, the members of the nominating and corporate governance committee are expected to be Jeff George, Kimberlee Drapkin, and Zach Scheiner. Jeff George is expected be the chair of the nominating and corporate governance committee. Graphite and LENZ believe that, after the

completion of the merger, the composition of the nominating and corporate governance committee will meet the requirements for independence under, and the functioning of such nominating and corporate governance committee will comply with, any applicable requirements of the rules and regulations of Nasdaq.

Compensation Committee Interlocks and Insider Participation

Each member of the compensation committee will be a "non-employee" director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act and independent within the meaning of the independent director guidelines of Nasdaq. None of the proposed combined company's executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers who is proposed to serve on the combined company's board of directors or compensation committee following the completion of the merger.

Non-Employee Director Compensation

Prior to the merger, LENZ did not have a formal policy to provide any cash or equity compensation to its non-employee directors for their service on its board of directors or committees of its board of directors, nor did any non-employee director receive any compensation for serving on the LENZ board of directors.

The combined company's board of directors intends to adopt an outside director compensation policy that is designed to provide a total compensation package that enables the combined company to attract and retain, on a long-term basis, high-caliber directors who are not employees or officers of the combined company or its subsidiaries. The outside director compensation policy is anticipated to become effective upon consummation of the merger.

Under the contemplated policy, the combined company's non-employee directors will be eligible to receive cash retainers (which will be prorated for partial years of service) and equity awards as set forth below:

Annual Retainer for Board Membership	
Annual service on the board of directors	$40,000
Additional retainer for annual service as non-executive chairperson	$30,000
Additional Annual Retainer for Committee Membership	
Annual service as audit committee chairperson	$15,000
Annual service as member of the audit committee (other than chairperson)	$ 7,500
Annual service as compensation committee chairperson	$12,000
Annual service as member of the compensation committee (other than chairperson)	$ 6,000
Annual service as nominating and governance committee chairperson	$10,000
Annual service as member of the nominating and governance committee (other than chairperson)	$ 5,000

In addition, the contemplated policy will provide that, each individual who is a non-employee director as of the effective date of the policy will be granted an award of stock options to purchase 37,000 shares of the combined company's common stock, with such number of shares subject to equitable adjustment by the combined company's board of directors in the event of a capitalization adjustment (the "Merger Award"). The Merger Award will be granted automatically on the first trading day on or after the effective date of the policy. Each Merger Award will be scheduled to vest in equal monthly installments over the next thirty-six (36) months on the same day of each relevant month as the applicable vesting date, in each case subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

The contemplated policy will also provide that, each individual who first becomes a non-employee director following the effective date of the policy and who does not receive a Merger Award will be granted an award of stock options to purchase 37,000 shares of the combined company's common stock, with such number of shares subject to equitable adjustment by the combined company's board of directors in the event of a capitalization adjustment (the "Initial Award"). The Initial Award will be granted automatically on the first trading day on or after the date on which such individual first becomes a non-employee director (the first date as a non-employee director, the "Initial Start Date"), whether through election by LENZ stockholders or appointment by the combined company's board of directors to fill a vacancy. Each Initial Award will be scheduled to vest in equal monthly installments over the next thirty-six (36) months following the Initial Start Date on the same day of each relevant month as the applicable Initial Start Date, in each case subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

On the first trading day immediately following each annual meeting of the combined company's stockholders following the merger (each, an "Annual Meeting"), each non-employee director automatically will be granted an award of stock options (an "Annual Award") to purchase 18,500 shares of the combined company's common stock, with such number of shares subject to equitable adjustment by the combined company's board of directors in the event of a capitalization adjustment; provided that the first Annual Award granted to an individual who first becomes a non-employee director following the effective date of the policy will cover a number of shares equal to the product of (A) 18,500 multiplied by (B) a fraction, (i) the numerator of which is the number of fully completed months between the applicable Initial Start Date and the date of the first Annual Meeting to occur after such individual first becomes a non-employee director, and (ii) the denominator of which is twelve (12), subject to equitable adjustment by the combined company's board of directors in the event of a capitalization adjustment. Each Annual Award will be scheduled to vest in full on the first anniversary of the date on which the Annual Award is granted, in each case subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

In the event of a change in control, each non-employee director will fully vest in his or her outstanding combined company equity awards granted under the contemplated policy as of immediately prior to the change in control, including any Merger Awards, Initial Awards and Annual Awards, provided that the non-employee director continues to be a non-employee director through the date of the change in control.

The aggregate amount of compensation, including both equity compensation and cash compensation, paid to any non-employee director of the combined company for services as a director in a calendar year period will not exceed $1,000,000 in the first calendar year such individual becomes a non-employee director and $750,000 in any other calendar year.

The combined company will reimburse all reasonable out-of-pocket expenses incurred by directors for their attendance at meetings of the board or any committee thereof.

Employee directors of the combined company will not receive any additional compensation for their service as a director.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

On November 14, 2023, Graphite Bio, Inc., a Delaware corporation ("Graphite"), entered into an Agreement and Plan of Merger (the "Merger Agreement") by and between Graphite, Generate Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Graphite ("Merger Sub"), and LENZ Therapeutics, Inc., a Delaware corporation ("LENZ"), pursuant to which, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into LENZ (the "merger"), with LENZ continuing as a wholly owned subsidiary of Graphite and the surviving corporation of the merger.

Subject to the terms and conditions of the Merger Agreement, at the effective time of the merger (the "effective time"),

a) each then-outstanding share of LENZ's common stock, par value $0.001 per share ("LENZ common stock"), will be converted into the right to receive a number of shares of Graphite's common stock, par value $0.00001 per share ("Graphite common stock"), based on a ratio calculated in accordance with the Merger Agreement (the "exchange ratio"),

b) each then-outstanding share of LENZ's preferred stock, par value $0.001 per share ("LENZ preferred stock"), will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of LENZ common stock into which each share of LENZ preferred stock is then convertible,

c) each then-outstanding option to purchase LENZ common stock will be assumed by Graphite, subject to adjustment as set forth in the Merger Agreement; and

d) each then-outstanding warrant to purchase shares of LENZ common stock or LENZ preferred stock will be converted into a warrant to purchase shares of Graphite common stock, subject to adjustment as set forth in the Merger Agreement.

Under the exchange ratio formula in the Merger Agreement, upon the closing of the merger (the "closing"), on a pro forma basis and based upon the number of shares of Graphite common stock expected to be issued in the merger, pre-merger LENZ stockholders will own approximately 65% of the combined company on a fully-diluted basis and pre-merger Graphite stockholders will own approximately 35% of the combined company on a fully-diluted basis (prior to giving effect to the Graphite private placement described below and excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP, each as defined in the Merger Agreement). Under certain circumstances further described in the Merger Agreement, the ownership percentages may be adjusted upward or downward based on the level of Graphite's net cash at the closing.

The exchange ratio assumes (i) a valuation for Graphite of $126.5 million, which is subject to adjustment to the extent that Graphite's net cash at closing is less than or greater than $175 million by $1 million or more before giving effect to the special cash dividend (as described below), as further described in the Merger Agreement, and (ii) a valuation for LENZ of $231.6 million. The exchange ratio is also based on the relative capitalization of each of Graphite and LENZ, for which, for the purposes of calculating the exchange ratio, the shares of Graphite common stock underlying Graphite stock options outstanding immediately prior to the effective time with an exercise price per share of less than or equal to $3.00 will be deemed outstanding, and all shares of LENZ common stock underlying outstanding LENZ stock options, warrants, and other derivative securities will be deemed outstanding.

The unexercised and outstanding Graphite stock options with an exercise price per share of equal to or greater than $3.00 (prior to giving effect to the special cash dividend and reverse stock split) will accelerate in full as of immediately prior to the effective time and each such stock option not exercised as of immediately prior to the effective time shall be cancelled at the effective time for no consideration. All Graphite stock options with an exercise price per share of less than $3.00 will continue to be subject to the same terms and conditions after the effective time as were applicable to such stock option as of immediately prior to the effective time.

In addition, in connection with the closing, Graphite expects to declare a cash dividend to the pre-merger Graphite stockholders of $60 million in the aggregate (the "special cash dividend"), provided such amount is subject to adjustment as set forth in the Merger Agreement.

In connection with the merger, Graphite will seek the approval of its stockholders to, among other things, (a) issue the shares of Graphite common stock issuable in connection with the merger and the Graphite private placement described below pursuant to the rules of The Nasdaq Stock Market LLC ("Nasdaq"), (b) adopt the 2024 Plan and the 2024 ESPP, and (c) amend its amended and restated certificate of incorporation to change Graphite's name to "LENZ Therapeutics, Inc." and effect a reverse stock split of Graphite common stock, at a reverse stock split ratio to be mutually agreed to by Graphite and LENZ.

On November 14, 2023, Graphite entered into a Subscription Agreement (the "Subscription Agreement") with certain existing LENZ stockholders and new investors (the "PIPE investors"). Pursuant to the Subscription Agreement, and subject to the terms and conditions of such agreements, Graphite agreed to sell, and the PIPE investors agreed to purchase, shares of Graphite common stock for an aggregate purchase price of $53.5 million (the "Graphite private placement"). The Subscription Agreement provides that the Graphite private placement amount (i) must be a minimum of $50 million and (ii) may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE investors.

The unaudited pro forma financial statements include adjustments to reflect the amendment and/or termination of multiple operating leases as required by the Merger Agreement, as well as the abandonment and/or disposal of tenant improvements, furniture and equipment (see Notes A and B to the pro forma financial statements).

The unaudited pro forma condensed combined financial information gives effect to the merger, which has been accounted for as a reverse recapitalization under U.S. generally accepted accounting principles ("GAAP"). Graphite will only hold cash and some nominal assets at the Closing. LENZ is considered the accounting acquirer for financial reporting purposes. This determination is based on the expectation that, immediately following the merger: (i) LENZ stockholders will own a substantial majority of the voting rights of the combined company; (ii) LENZ will designate a majority (five of seven) of the initial members of the board of directors of the combined company; and (iii) LENZ's senior management will hold all key positions in senior management of the combined company. The transaction is expected to be accounted for as a reverse recapitalization of Graphite by LENZ similar to the issuance of equity for the net assets of Graphite, which are expected to be primarily cash, short-term investments, and other non-operating assets.

As a result of LENZ being treated as the accounting acquirer, LENZ's assets and liabilities will be recorded at their pre-combination carrying amounts. Graphite's assets and liabilities will be measured and recognized at their fair values as of the effective time, which are expected to approximate the carrying value of the acquired cash and other non-operating assets. Any difference between the consideration transferred and the fair value of the net assets of Graphite following determination of the actual purchase consideration for Graphite will be reflected as an adjustment to additional paid-in capital. Upon consummation of the merger, the historical financial statements of LENZ will become the historical consolidated financial statements of the combined company.

The unaudited pro forma condensed combined balance sheet data assumes that the merger took place on September 30, 2023 and combines the historical balance sheets of Graphite and LENZ as of such date. The unaudited pro forma condensed combined statements of operations for the nine-month period ended September 30, 2023 and for the year ended December 31, 2022 assume that the merger took place as of January 1, 2022 and combine the historical results of Graphite and LENZ for the periods then ended. The unaudited pro forma condensed combined financial information was prepared pursuant to the rules and regulations of Rule 8-05 and Article 11 of SEC Regulation S-X.

The unaudited pro forma condensed combined financial information is provided for illustrative purposes only, does not necessarily reflect what the actual consolidated results of operations and financial position would have been had the acquisition occurred on the dates assumed and may not be useful in predicting the future consolidated results of operations or financial position.

The unaudited pro forma condensed combined financial information is based on the assumptions and adjustments that are described in the accompanying notes. Accordingly, the pro forma adjustments are preliminary, subject to further revision as additional information becomes available and additional analyses are performed and have been made solely for the purpose of providing unaudited pro forma condensed combined financial information. Differences between these preliminary accounting conclusions and estimates and the final accounting conclusions and amounts may occur as a result of, among other reasons, (i) changes in initial assumptions in the determination of the accounting acquirer and related accounting, (ii) changes in the amount of cash used in Graphite's operations, and (iii) other changes in Graphite's assets and liabilities, which are expected to be completed after the closing, and these differences could have a material impact on the accompanying unaudited pro forma condensed combined financial information and the combined company's future results of operations and financial position.

The unaudited pro forma condensed combined financial information does not give effect to the potential impact of current financial conditions, regulatory matters, operating efficiencies or other savings or expenses that may be associated with the integration of the two companies. The unaudited pro forma condensed combined financial information, including the notes thereto, should be read in conjunction with the separate historical financial statements of Graphite and LENZ, and their respective management's discussion and analysis of financial condition and results of operations included elsewhere in, or incorporated by reference to, this proxy statement/prospectus.

The accounting policies of Graphite may materially vary from those of LENZ. During preparation of the unaudited pro forma condensed combined financial information, management has performed a preliminary analysis and is not aware of any material differences, and accordingly, this unaudited pro forma condensed combined financial information assumes no material differences in accounting policies. Following the Merger, management will conduct a final review of Graphite's accounting policies in order to determine if differences in accounting policies require adjustment or reclassification of Graphite's results of operations or reclassification of assets or liabilities to conform to LENZ's accounting policies and classifications. As a result of this review, management may identify differences that, when conformed, could have a material impact on these unaudited pro forma condensed combined financial statements.

Unaudited Pro Forma Condensed Combined Balance Sheets
As of September 30, 2023
(In thousands)

	Graphite Bio, Inc. Historical	Lenz Therapeutics, Inc. Historical	Transaction Accounting Adjustments	Notes	Pro Forma Combined
ASSETS					
Current assets:					
Cash and cash equivalents	$ 182,988	$ 42,848	$ (36,705)	A	$ 178,942
			49,672	C	
			139	E	
			(60,000)	K	
Investments in marketable securities	50,998	45,305	—		96,303
Assets held for sale	20	—	(20)	B	—
Prepaid expenses and other current assets	4,777	1,726	(1,639)	E	4,864
Total current assets	238,783	89,879	(48,553)		280,109
Restricted cash	1,716	—	(1,600)	A	116
Property and equipment, net	12,534	58	(12,534)	B	58
Operating lease right-of-use assets	13,195	351	(12,842)	A	704
Deferred offering costs	—	1,866	(1,866)	P	—
Other assets	—	21	—		21
TOTAL ASSETS	**$ 266,228**	**$ 92,175**	**$ (77,395)**		**$ 281,008**
LIABILITIES, CONVERTIBLE PREFERRED AND COMMON STOCK, AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	$ 3,753	$ 5,148	—		$ 8,901
Accrued compensation	1,899	—	(1,899)	D	—
Accrued research and development	30	—	(30)	D	—
Accrued expenses and other current liabilities	3,416	11,698	1,929	D	17,043
Operating lease liability, current	3,439	—	(3,164)	A	275
Other current liabilities	—	—	5,396	F	15,125
			9,729	G	
Total current liabilities	12,537	16,846	11,961		41,344
Operating lease liabilities, non-current	49,672	227	(49,517)	A	382
Other noncurrent liabilities	—	140	—		140
Preferred stock warrants liability	—	1,140	(1,140)	L	—
Total liabilities	62,209	18,353	(38,696)		41,866
Commitments and Contingencies					
Convertible Preferred and Common Stock:					
Series A convertible preferred stock	—	44,621	(44,621)	I	—
Series A-1 convertible preferred stock	—	9,893	(9,893)	I	—
Series B convertible preferred stock	—	82,976	(82,976)	I	—
Class B convertible common stock	—	5,900	(5,900)	I	—
Total convertible preferred and common stock	**—**	**143,390**	**(143,390)**		**—**
Stockholders' equity:					
Preferred stock	—	—	—		—
Common stock	1	10	—	C	2
			56	I	
			(64)	J	
			(1)	M	
Additional paid-in capital	548,249	1,980	49,672	C	313,254
			(286,647)	N	
Accumulated deficit	(344,136)	(71,553)	1,534	A	(74,109)
			(12,554)	B	
			355,966	O	
			(1,866)	P	
			(1,500)	E	
Accumulated other comprehensive loss	(95)	(5)	95	M	(5)
Total stockholders' equity (deficit)	**204,019**	**(69,568)**	**104,691**		**239,142**
TOTAL LIABILITIES, CONVERTIBLE PREFERRED AND COMMON STOCK, AND STOCKHOLDERS' EQUITY	**$ 266,228**	**$ 92,175**	**$ (77,395)**		**$ 281,008**

Unaudited Pro Forma Condensed Combined Statements of Operations
For the Nine Month Period Ended September 30, 2023
(In thousands, except share and per share amounts)

	Graphite Bio, Inc. Historical	Lenz Therapeutics, Inc. Historical	Transaction Accounting Adjustments	Notes	Pro Forma Combined
Operating expenses:					
Research and development	$ 32,136	$ 39,968	$ —		$ 72,104
Selling, general and administrative	26,372	7,472	—		33,844
Restructuring and impairment costs	51,128	—	—		51,128
Total operating expenses	109,636	47,440	—		157,076
Loss from operations	(109,636)	(47,440)	—		(157,076)
Other income (expense):					
Other	(413)	1,164	146	**L**	(440)
			(1,337)	**D**	
Gain (loss) on disposal of assets	(71)	—	—		(71)
Interest income	8,387	—	1,337	**D**	9,724
Total other income (expense), net	7,903	1,164	146		9,213
Net loss	(101,733)	(46,276)	146		(147,863)
Unrealized gain (loss) on investments in marketable securities	953	(5)	—		948
Comprehensive loss	$ (100,780)	$ (46,281)	$ 146		$ (146,915)
Net loss per share, basic and diluted	$ (1.79)	$ (4.78)	$ N/A		$ (0.85)
Weighted-average shares of common stock outstanding, basic and diluted	56,748,995	9,675,142	107,603,727	**Q**	174,027,864

Unaudited Pro Forma Condensed Combined Statements of Operations
For the Year Ended December 31, 2022
(In thousands, except share and per share amounts)

	Graphite Bio, Inc. Historical	Lenz Therapeutics, Inc. Historical	Transaction Accounting Adjustments	Notes	Pro Forma Combined
Revenue	$ —	$ 15,000	$ —		$ 15,000
Operating expenses:					
Research and development	72,787	21,125	371	**E**	94,283
Selling, general and administrative	32,852	4,358	1,129	**E**	50,624
			9,729	**G**	
			690	**H**	
			1,866	**P**	
Restructuring and impairment costs	—	—	11,020	A,B	11,020
Total operating expenses	105,639	25,483	24,805		155,927
Loss from operations	(105,639)	(10,483)	(24,805)		(140,927)
Other income (expense):					
Other	—	19	(21)	**L**	(2)
Interest income	4,587	—	—		4,587
Total other income (expense), net	4,587	19	(21)		4,585
Net loss before income tax	$ (101,052)	$ (10,464)	$ (24,826)		$ (136,342)
Provision for income taxes	—	(347)	—		(347)
Net loss	$ (101,052)	$ (10,811)	$ (24,826)		$ (136,689)
Unrealized gain (loss) on investments in marketable securities	(1,048)	—	—		(1,048)
Comprehensive loss	$ (102,100)	$ (10,811)	$ (24,826)		$ (137,737)
Net loss per share, basic and diluted	$ (1.84)	$ (1.14)	N/A		$ (0.80)
Weighted-average shares of common stock outstanding, basic and diluted	54,873,675	9,455,393	107,512,861	**Q**	171,841,929

NOTES TO THE UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

1. Description of the Transaction

Graphite, Merger Sub and LENZ have entered into the Merger Agreement, pursuant to which the Merger Sub will merge with and into LENZ, with LENZ surviving as the surviving company. As a result of the merger, LENZ will be a wholly owned subsidiary of Graphite. Upon the effective time, all shares of LENZ capital stock outstanding immediately prior to the effective time, after giving effect to the preferred stock conversion and excluding any shares held in treasury stock by LENZ or owned by Graphite or any subsidiary of Graphite or LENZ and any dissenting shares, will be converted into the right to receive approximately 92,734,375 shares of Graphite Common Stock in the aggregate, based on an assumed exchange ratio of 1.4135, which is subject to adjustment as set forth in the Merger Agreement. Graphite will assume outstanding and unexercised stock options and warrants to purchase shares of LENZ capital stock, and in connection with the merger they will be converted into options and warrants to purchase shares of Graphite common stock based on the final exchange ratio.

Immediately following the effective time, LENZ stockholders are expected to own or hold rights to acquire 65.0% of the combined company and Graphite stockholders are expected to own or hold rights to acquire 35.0% of the combined company, in each case, on a fully-diluted basis and, in the case of Graphite, using the treasury stock method (prior to giving effect to the Graphite private placement and excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP). Under certain circumstances further described in the Merger Agreement, the ownership percentages may be adjusted upward or downward based on the level of Graphite's net cash at closing.

Consummation of the merger is subject to certain closing conditions, including, among other things, approval by the Graphite stockholders.

2. Basis of Pro Forma Presentation

The unaudited pro forma condensed combined financial information has been prepared in accordance with Rule 8-05 and Article 11 of SEC Regulation S-X. The unaudited pro forma condensed combined statements of operations for the nine-month period ended September 30, 2023 and for the year ended December 31, 2022, give effect to the merger and other events as if it had been consummated on January 1, 2022 and combine the historical statements of operations of Graphite and LENZ as of such date.

The unaudited pro forma condensed combined balance sheet as of September 30, 2023 gives effect to the merger and other events and combines the historical balance sheets of Graphite and LENZ as of such date. Based on LENZ's preliminary review of LENZ's and Graphite's summary of significant accounting policies and preliminary discussions between management teams of LENZ and Graphite, the nature and amount of any adjustments to the historical financial statements of Graphite to conform its accounting policies to those of LENZ are not expected to be material. Upon completion of the merger, further review of Graphite's accounting policies may result in additional revisions to Graphite's accounting policies and classifications to conform to those of LENZ.

For purposes of these pro forma financial statements, the estimated purchase price consideration consists of the following:

	Amount
Estimated number of shares of the combined company to be owned by Graphite stockholders(i)	58,837,013
Multiplied by the estimated fair value of Graphite common stock(ii)	2.36
Total (in thousands)	$ 138,855
Estimated fair value of assumed Graphite equity awards based on pre-combination service (in thousands)(iii)	257
Total estimated purchase price (in thousands)	$ 139,112

(i) Reflects the number of shares of common stock of the combined company that Graphite equity holders are expected to own as of the effective time pursuant to the Merger Agreement. This amount is calculated, for purposes of this unaudited pro forma condensed combined financial information, based on shares of Graphite common stock outstanding at September 30, 2023, and contemplation of equity instruments that are in-the-money and expected to be net exercised using the treasury stock method.
(ii) Reflects the price per share of Graphite common stock, which is the closing bid price of Graphite common stock as reported by Nasdaq on November 27, 2023.
(iii) Reflects the estimated acquisition-date fair value of the assumed Graphite equity awards attributable to pre-merger service expected to be outstanding as of the effective time.

The actual purchase price consideration transferred for the net assets of Graphite will vary based on, among other things, the net cash calculation prior to closing, the exchange ratio, Graphite share price at closing and the number of shares issued in the Graphite private placement as described above and that difference could be material. As such, the estimated purchase price consideration reflected in these unaudited pro forma condensed combined financial information does not purport to represent what the actual purchase price consideration will be when the merger is completed. The actual purchase price will fluctuate until the effective time, and the final valuation of the purchase price consideration could differ significantly from the current estimate.

For accounting purposes, LENZ is considered to be the acquiring company and the merger is expected to be accounted for as a reverse recapitalization of Graphite by LENZ because on the merger date, the pre-combination assets of Graphite are expected to be primarily cash, short-term investments, and other non-operating assets.

Under reverse recapitalization accounting, the assets and liabilities of Graphite will be recorded, as of the completion of the merger, at their fair value, which is expected to approximate the carrying value of the pre-combination assets. Any difference between the final fair value of the consideration transferred and the fair value of the net assets of Graphite following determination of the actual purchase price consideration for Graphite will be reflected as an adjustment to additional paid-in capital. As a result, any change in fair value of the consideration transferred is not expected to materially affect the unaudited pro forma condensed combined financial information. The subsequent financial statements of LENZ will reflect the combined operations of LENZ as the acquirer for accounting purposes together with a deemed issuance of shares, equivalent to the shares held by the stockholders of the legal acquirer, Graphite, immediately prior to the effective time, and a recapitalization of the equity of the accounting acquirer, LENZ.

The accompanying unaudited pro forma condensed combined financial information is derived from the historical financial statements of Graphite and LENZ, and include adjustments to give pro forma effect to reflect the accounting for the transaction and other events in accordance with GAAP. The historical financial statements of LENZ shall become the historical financial statements of the combined company.

LENZ and Graphite may incur significant costs associated with integrating the operations of LENZ and Graphite after the merger is completed. The unaudited pro forma condensed combined financial information does

not reflect the costs of any integration activities or benefits that may result from realization of future cost savings from operating efficiencies expected to result from the merger.

The unaudited pro forma condensed combined financial information may differ from the final recapitalization accounting for a number of reasons, including the fact that the estimate of the fair value of Graphite's net assets at closing is preliminary and subject to change up to the closing. The differences that may occur between the preliminary estimate and the final purchase accounting could have a material impact on the accompanying unaudited pro forma condensed combined financial information.

3. Shares of Graphite Common Stock Issued to LENZ Stockholders upon Closing of the Merger

At the closing of the merger, (i) each then-outstanding share of LENZ common stock will be converted into the right to receive a number of shares of Graphite common stock equal to the exchange ratio, (ii) each then-outstanding share of LENZ Preferred Stock will be converted into a number of shares of Graphite common stock equal to the exchange ratio multiplied by the aggregate number of shares of LENZ common stock into which each such share of LENZ preferred stock is then convertible, and (iii) each then-outstanding warrant to purchase LENZ preferred stock will be converted into a warrant to purchase a number of shares of Graphite common stock equal to the exchange ratio multiplied by the number of shares of LENZ common stock issuable upon the conversion of the shares of LENZ preferred stock subject to the unexercised portion of such warrant. The assumed exchange ratio for purposes of the unaudited pro forma condensed combined financial information of 1.4135 was derived on a fully-diluted basis using the treasury stock method for Graphite as of November 9, 2023 using a negotiated value of LENZ of approximately $231.6 million and of Graphite of approximately $126.5 million.

The estimated number of shares of Graphite Common Stock that Graphite expects to issue to LENZ's stockholders (ignoring rounding of fractional shares) assumes Graphite's net cash at Closing is $115 million and is determined as follows:

	Amount
Shares of Lenz common stock issued at September 30, 2023	9,915,013
Shares of Lenz Class B common stock and preferred stock outstanding at September 30, 2023	55,691,195
	65,606,208
Exchange ratio	1.4135
Estimated shares of Graphite common stock expected to be issued to Lenz upon closing	92,734,375

4. Adjustments to Unaudited Pro Forma Condensed Combined Financial Statements

Adjustments included in the column under the heading "Transaction Accounting Adjustments" reflect the application of the required accounting to the merger, applying the effects of the merger to LENZ's and Graphite's historical financial information. Further analysis will be performed after the completion of the merger to confirm these estimates or make adjustments in the final purchase price allocation, as necessary.

Both LENZ and Graphite have a history of generating net operating losses and maintain a full valuation allowance against their net deferred tax assets, and management has not identified any changes to the income tax positions due to the merger that would result in an incremental tax expense or benefit. Accordingly, management assumed a statutory tax rate of 0% and no tax-related adjustments have been reflected for the pro forma adjustments.

The unaudited pro forma adjustments included in the unaudited pro forma condensed combined financial information are as follows:

Transaction Accounting Adjustments:

A. To reflect the derecognition of multiple operating leases that were terminated or amended subsequent to September 30, 2023. In October 2023, an operating lease for the building located at 233 E. Grand Avenue, South San Francisco, California was amended. Graphite prepaid $15.9 million in rent through December 31, 2024 and made a termination payment of $20.8 million. The operating lease right-of-use asset, operating lease liabilities, current and operating lease liabilities, non-current totaling $12.5 million, $1.8 million and $48.9 million, respectively, were derecognized, resulting in a $1.5 million gain on termination of lease.

In November 2023, a sublease was entered into for a portion of the building located at 201 Haskins Way, South San Francisco, California and was subsequently assigned to the landlord. Graphite paid $1.6 million in connection with the sublease and has no further obligations. The operating lease liabilities, current and operating lease liabilities, non-current totaling $1.1 million and $0.6 million, respectively were derecognized, resulting in a $41,000 gain on termination of lease.

One other operating lease was also terminated. The operating lease right-of-use asset and operating lease liabilities, current totaling $0.3 million and $0.3 million, respectively, were derecognized, resulting in an $11,000 gain on termination of lease.

B. To reflect the abandonment and/or disposal of tenant improvements, furniture and equipment totaling $12.5 million.

C. To reflect the planned sale and issuance of approximately 24,883,552 shares of Graphite common stock with a par value of $0.001, at a per share price of $2.15 (subject to adjustment for the final exchange ratio and the reverse stock split), by Graphite as a result of the Graphite private placement to occur substantially concurrently with the closing of the merger for $53.5 million in gross proceeds, less an estimated $3.8 million in issuance costs. The completion of the Graphite private placement is contingent upon the concurrent closing of the merger.

D. To reclassify $1.9 million from accrued compensation and accrued research and development to accrued expenses to conform Graphite's balance sheet presentation to LENZ's and to reclassify $1.3 million from other to interest income to conform LENZ's statement of operations presentation to Graphite's.

E. To derecognize $1.6 million of Graphite's prepaid expenses including $1.1 million of prepaid directors' and officers' insurance and $0.4 million of research and development tax credits that cannot be utilized upon closing of the merger, as well as, to reclass a $0.1 million security deposit from prepaid expenses to cash upon termination of a lease.

F. To reflect preliminary estimated transaction costs of $5.4 million, not yet reflected in the historical financial statements, that are expected to be incurred by LENZ in connection with the merger, such as legal fees, accounting expenses and consulting fees, as an increase in accrued liabilities and a reduction to additional paid-in capital in the unaudited pro forma condensed combined balance sheet. As the merger will be accounted for as a reverse recapitalization equivalent to the issuance of equity for the net assets, primarily cash and short-term investments, of Graphite, these direct and incremental costs are treated as a reduction of the net proceeds received within additional paid-in capital (See Note N).

G. To reflect preliminary estimated transaction costs of $9.7 million, not yet reflected in the historical financial statements, which are expected to be incurred by Graphite in connection with the merger, such as adviser fees, legal, and directors' and officers' liability insurance expenses, as an increase in other current liabilities and accumulated deficit in the unaudited pro forma condensed combined balance sheet and as selling, general and administrative expense in the unaudited pro forma condensed combined statement of operations.

H. To reflect (1) $0.3 million of consideration transferred related to pre-combination service of replacement awards and (2) the post-combination share-based compensation expense of $0.7 million as an increase in

additional paid-in-capital and accumulated deficit related to the acceleration of vesting upon the change of control and termination of employment for certain awards.

I. Reclassification of $143.4 million to additional paid-in-capital, related to LENZ preferred stock, and reflecting the conversion of 52,947,011 shares of LENZ preferred stock and 2,744,184 shares of LENZ Class B common stock into LENZ common stock immediately prior to the merger to be exchanged for 92,734,375 shares of Graphite common stock at an assumed exchange ratio of 1.4135.

J. Reclassification of $64,000 from LENZ common stock to additional paid-in-capital related to LENZ common stock outstanding as of September 30, 2023, after giving effect to the conversion of LENZ preferred stock and Class B common stock discussed in Note I, that convert into Graphite common stock at an assumed exchange ratio of 1.4135. The par value of LENZ common stock is $0.001 while the par value of Graphite common stock is $0.00001, which has been reflected as a decrease to the par value of LENZ common stock.

K. Concurrent with the closing of the merger, an expected special cash dividend in an expected amount of $60.0 million will be paid to Graphite stockholders, subject to certain adjustments depending on Graphite's net cash and the Graphite private placement.

L. Represents the conversion of LENZ's preferred warrants into warrants to purchase Graphite common stock upon the closing of the merger, resulting in a reduction in the warrant liability of $1.1 million. Also represents the elimination of other income (loss) as these warrants were recorded at fair value, and subsequently adjusted to their current fair value at each reporting period with changes reflected in earnings, for warrants that convert upon consummation of the merger.

M. To reflect the elimination of Graphite's historical net equity, which represents the net assets acquired in the reverse capitalization:

Footnote to eliminate historical Graphite net equity and net assets

	Amount
Pre-combination Graphite additional paid-in Capital:	
Historical Graphite additional paid-in capital	$(548,249)
Pre-combination Graphite accumulated deficit:	
Historical Graphite accumulated deficit	344,136
Graphite transaction costs (Note G)	9,729
Derecognition of multiple operating leases (Note A)	(1,534)
Derecognition of tenant improvements, furniture and equipment (Note B)	12,554
Derecognition of Graphite prepaid expenses (Note E)	1,500
Total pre-combination Graphite accumulated deficit	366,385
Graphite common stock	(1)
Graphite accumulated other comprehensive loss	95
Total adjustment to historical equity (net assets of Graphite)	$(181,770)

N. The pro forma adjustments recorded in additional paid-in capital as noted include:

Adjustments to Additional Paid-in Capital

	Amount
Elimination of pre-combination Graphite additional paid-in capital (Note M)	$(548,249)
Record purchase of Graphite historical net assets (Note M)	181,770
Expected transaction costs of Lenz (Note F)	(5,396)
Share-based compensation expense related to Graphite's acceleration of options upon a change-in-control (Note H)	690
Cash dividend paid to Graphite stockholders upon a change-in-control (Note K)	(60,000)
Conversion of Lenz preferred stock into Lenz common stock (Note I)	143,334
Conversion of historical Lenz common stock issued at September 30, 2023 (Note J)	64
Conversion of Lenz preferred warrants into Graphite common warrants (Note L)	1,140
Total adjustments to additional paid-in capital	$(286,647)

O. The pro forma adjustments recorded to accumulated deficit as noted include:

Adjustments to accumulated deficit

	Amount
Elimination of historical Graphite accumulated deficit (Note M)	$344,136
Share-based compensation expense related to Graphite's acceleration of options upon a change-in-control (Note H)	(690)
Derecognition of multiple operating leases (Note A)	(1,534)
Derecognition of tenant improvements, furniture and equipment (Note B)	12,554
Derecognition of Graphite prepaid expenses (Notes E)	1,500
Total adjustment to accumulated deficit	$355,966

P. Derecognition of LENZ's deferred offering costs related to an abandoned initial public offering.

Q. The pro forma basic and diluted earnings per share have been adjusted to reflect the pro forma net loss for the year ended December 31, 2022 and the nine months ended September 30, 2023. In addition, the number of shares used in calculating the pro forma combined basic and diluted net loss per share has been adjusted to reflect the estimated total number of shares of common stock of the combined company for the respective periods. For the year ended December 31, 2022 and the nine months ended September 30, 2023, the pro forma weighted average shares outstanding has been calculated as follows:

	For the Nine Months Ended September 30, 2023	For the Year Ended December 31, 2022
Lenz weighted-average shares of common stock outstanding	9,675,142	9,455,393
Impact of Lenz preferred stock and Class B common stock assuming conversion as of January 1, 2022	55,691,195	55,691,195
Total	65,366,337	65,146,588
Application of the exchange ratio to historical Lenz weighted-average shares outstanding	1.4135	1.4135
Adjusted Lenz weighted-average shares outstanding	92,395,317	92,084,702
Issuance of shares in the Graphite private placement	24,883,552	24,883,552
Historical Graphite weighted-average shares of common stock outstanding	56,748,995	54,873,675
Total pro forma weighted-average shares outstanding	174,027,864	171,841,929

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS OF THE COMBINED COMPANY

In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements, with LENZ's and Graphite's directors and executive officers, including those discussed in the sections titled "*Management Following the Merger*," "*LENZ Executive Compensation*" and "*Graphite Executive Compensation*" beginning on pages 380, 246 and 236, respectively of this proxy statement/prospectus, the following is a description of each transaction involving Graphite since January 1, 2021, each transaction involving LENZ since January 1, 2021 and each currently proposed transaction in which:

- either LENZ or Graphite has been or is to be a participant;
- the amounts involved exceeded or will exceed the lesser of $120,000 and 1% of the average of LENZ's or Graphite's total assets at year-end for the last two completed fiscal years, as applicable; and
- any of LENZ's or Graphite's directors, executive officers or holders of more than 5% of LENZ's or Graphite's capital stock, or an affiliate or immediate family member of the foregoing persons, had or will have a direct or indirect material interest.

Graphite Transactions

As a smaller reporting company, SEC rules require Graphite to disclose any transaction for the last two completed fiscal years or any currently proposed transaction in which Graphite is a participant and in which any related person has or will have a direct or indirect material interest involving an amount in excess of $120,000 or 1% of the average of Graphite's total assets at year-end for the last two fiscal years. A related person is any executive officer, director, nominee for director or holder of 5% or more of the Graphite common stock or an immediate family member of any of those persons.

Other than the compensation agreements and other arrangements described under the sections titled "*Graphite's Executive Compensation*" and "*Graphite's Director Compensation*" beginning on pages 236 and 242, respectively, in this proxy statement/prospectus and the transactions described below, since January 1, 2021, there has not been and there is not currently proposed, any transaction or series of similar transactions to which Graphite were, or will be, a party in which the amount involved exceeded, or will exceed, $120,000 (or, if less, 1% of the average of Graphite's total assets amounts at December 31, 2021 and 2022) and in which any director, executive officer, holder of five percent or more of any class of Graphite's capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, Graphite entered into the LOA with Kamau pursuant to which it exclusively licensed to Kamau, and granted Kamau, an option to acquire certain intellectual property and materials related to its nula-cel program and related pre-clinical platform assets. The option includes rights to assume the License Agreement and the First Option Agreement with Stanford, as well as the IDT License Agreement, among other agreements. Exercise of the option is contingent on Kamau raising a minimum of $10 million in funds no later than August 4, 2024 (the "Financing Milestone"), which contingency may be waived by Graphite. All rights to the intellectual property and materials will revert to Graphite if the milestone is not achieved or if Kamau elects not to exercise the option. In return for this license and option, Graphite received an equity interest in Kamau representing 20% of all outstanding shares on a fully diluted basis subject to dilution protection until the Financing Milestone. The LOA includes customary representations and warranties, limitations of liability and indemnification obligations for a transaction of this nature. The LOA automatically expires upon the first to occur of: (1) Kamau's exercise of the option, (2) Kamau's failure to exercise the option within a specified exercise period following achievement of the financing milestone, or (3) Kamau's failure to achieve the

financing milestone by a pre-agreed deadline. In addition, either party has the right to terminate the LOA for the uncured material breach or insolvency of the other party, and Graphite has the right to terminate the LOA if Kamau challenges any of the patent rights that are subject to the option. As a result of the 20% equity interest, Graphite has the ability to exert significant influence over Kamau and accounts for the interest as an equity method investment. Graphite records its proportionate share of investee's equity in earnings or losses based on the most recently available financial information. Dr. Porteus, a director and stockholder of Graphite, is the founder and chief executive officer of Kamau.

On September 12, 2023, Graphite and Kamau entered into an amendment to the LOA, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option.

The 20% equity interest in the counterparty had minimal value upon execution of the LOA and Graphite did not record any amount related to the equity interest as of September 30, 2023. As of December 31, 2023, Kamau has not achieved the financial milestone and does not have the right to exercise the option.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, Graphite entered into the APA with Maro pursuant to which Graphite sold to Maro, concurrently with the execution of the APA, certain assets related to its non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Maro is formed by Samsara BioCapital and funds affiliated with Versant Ventures, both of which are greater than 5% stockholders of Graphite. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million as well as certain transition services to be provided by Graphite to Maro. Under the APA, Maro will also pay us a sub single digit percentage cash royalty of worldwide net sales of certain products incorporating the acquired technology. The royalty term will terminate on a product-by-product and country-by-country basis on the latest of (i) the ten (10) year anniversary of the first commercial sale of such product in such country, (ii) the expiration of the last-to-expire valid claim of a transferred patent that covers such product in such country, and (iii) the expiration of regulatory exclusivity with respect to such product in such country. The APA also includes customary representations and warranties, covenants and indemnification obligations for a transaction of this nature.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the three and nine months ended September 30, 2023, Graphite recognized a loss on disposal of $0.1 million, which was recorded in other income. Graphite will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of September 30, 2023.

Graphite Private Placement

On November 14, 2023, in connection with the execution of the Merger Agreement, Graphite entered into the Subscription Agreement with certain investors to consummate the Graphite private placement. Pursuant to the Subscription Agreement, the PIPE investors agreed to purchase an aggregate of $53.5 million in shares of Graphite common stock, which amount may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional investors in one or more Permitted Financings. The closing of the Graphite private placement is conditioned upon the satisfaction or waiver of the conditions to the merger as

well as certain other conditions. The table below sets forth the number of shares of the Graphite common stock expected to be purchased by related party holders at the closing of the Graphite private placement:

Participant	Shares of Graphite's common stock	Total Purchase Price ($)
Entities affiliated with RA Capital[1]	6,976,697	$ 15,000,000
Alpha Wave Ventures II, LP[2]	6,279,027	$ 13,500,000
Sectoral Asset Management Inc.[3]	2,325,566	$ 5,000,000
McCollum Living Trust[4]	116,278	$ 250,000

(1) Zach Scheiner, a member of the LENZ board of directors, is an affiliate of RA Capital.
(2) Chris Dimitropoulos, a member of the LENZ board of directors, is an affiliate of Alpha Wave Ventures II, LP.
(3) Stefan Larson, a member of the LENZ board of directors, is a partner at Sectoral Asset Management Inc.
(4) James McCollum, a member of the LENZ board of directors, is the trustee of the McCollum Living Trust.

In connection with the Subscription Agreement, Graphite agreed to enter into a registration rights agreement, contemporaneously with the sale of shares pursuant to the Graphite private placement, with the PIPE investors pursuant to which Graphite agreed to prepare and file a registration statement with the SEC within 10 days after the closing of the Graphite private placement for the purposes of registering the resale of the shares. Graphite also agreed, among other things, to indemnify the PIPE Investors, their officers, directors, members, employees and agents, successors and assigns under the registration statement from certain liabilities and pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incidents to Graphite's obligations under the registration rights agreement.

Support Agreements Under the Merger

Concurrently with the execution of the Merger Agreement, (i) certain Graphite stockholders, owning in the aggregate approximately 52% of the outstanding shares of Graphite common stock have entered into the Graphite Support Agreements with Graphite and LENZ to vote all of their shares of Graphite common stock in favor of the Graphite Stockholder Proposals, and (ii) certain LENZ stockholders holding approximately 70% of the outstanding shares of LENZ capital stock have entered into the LENZ Support Agreements with LENZ and to vote all of their shares of LENZ capital stock in favor of the Merger Agreement and the related contemplated transactions and against any alternative acquisition proposals. In the event of a Graphite board recommendation change, then the aggregate number of shares of Graphite common stock subject to the Graphite Support Agreement will automatically be reduced on a pro rata basis so that the aggregate number of such shares of Graphite common stock shall collectively only constitute the greater of (a) 20% of the outstanding shares of Graphite capital stock or (b) 30% of the votes cast in support of the Graphite Stockholder Proposals.

The foregoing descriptions of the Support Agreements do not purport to be complete and are qualified in their entirety by the full text of the forms of Support Agreements, which are attached hereto as *Annex C* and *Annex D*.

Lock-Up Agreements

Concurrently with the execution of the Merger Agreement, certain executive officers, directors and stockholders of Graphite and LENZ have entered into the Lock-Up Agreements with Graphite, pursuant to which such parties have agreed not to, except in limited circumstances, sell or transfer their shares of Graphite common stock, for the 90-day period following the closing.

The Graphite stockholders who have executed Lock-Up Agreements as of November 14, 2023, owned in the aggregate, approximately 43% of the shares of Graphite's outstanding capital stock.

The foregoing description of the Lock-Up Agreements does not purport to be complete and is qualified in its entirety by the full text of the form of Lock-Up Agreement, which is attached hereto as *Annex E*.

Graphite Indemnification Agreements

Graphite has entered into agreements, and in the future plans to enter into, agreements to indemnify its directors and executive officers. These agreements, among other things, require Graphite to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in Graphite's right, on account of any services undertaken by such person on behalf of Graphite or that person's status as a member of the Graphite board of directors to the maximum extent allowed under Delaware law.

Graphite Policies for Approval of Related Party Transactions

Prior to the IPO, Graphite did not have a formal policy regarding approval of transactions with related parties. Graphite has adopted a written related person transaction policy that sets forth its procedures for the identification, review, consideration and approval or ratification of related person transactions. For purposes of Graphite's policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which Graphite and any related person are, were, or will be participants and in which the amount involved exceeds $120,000 or one percent of Graphite's total assets at year-end for the last two completed fiscal years. Transactions involving compensation for services provided to Graphite as an employee or director are not covered by this policy. A related person is any executive officer, director, or beneficial owner of more than 5% of any class of Graphite's voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, Graphite's management must present information regarding the related person transaction to its audit committee, or, if audit committee approval would be inappropriate, to another independent body of the Graphite board of directors, for review, consideration, and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to Graphite of the transaction, and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, Graphite will collect information that it deems reasonably necessary from each director, executive officer, and, to the extent feasible, significant stockholder to enable it to identify any existing or potential related person transactions and to effectuate the terms of the policy.

In addition, under Graphite's Code of Business Conduct and Ethics, its employees and directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

In considering related person transactions, Graphite's audit committee, or other independent body of its board of directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs, and benefits to Graphite;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director, or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify, or reject a related person transaction, Graphite's audit committee, or other independent body of its board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, Graphite's best interests and those of its stockholders, as its audit committee, or other independent body of its board of directors, determines in the good

faith exercise of its discretion. All of the compensation agreements and other arrangements described under the sections titled "*Graphite's Executive Compensation*" and "*Graphite's Director Compensation*" beginning on pages 236 and 242 of this proxy statements/prospectus were entered into prior to the adoption of the written policy, but all were approved by the Graphite board of directors considering similar factors to those described above.

LENZ Transactions

The following is a summary of each transaction or series of similar transactions since January 1, 2021 or any currently proposed transaction, to which LENZ was or is a party in which:

- the amount involved in the transaction exceeds or will exceed the lesser of $120,000 or 1% of the average of LENZ's total assets for the last two completed fiscal years; and
- any of LENZ's executive officers, directors or holders of more than 5% of any class of LENZ's capital stock or an affiliate or immediate family member of the foregoing persons had or will have a direct or indirect material interest.

Compensation arrangements for LENZ's named executive officers and directors are described in the sections titled "*LENZ Executive Compensation*" and "*LENZ Director Compensation*" beginning on pages 246 and 254 of this proxy statement/prospectus.

Private Placements of Securities

Series A Preferred Stock Financing

In October 2020, LENZ issued and sold an aggregate of 814,495 shares of its Series A Preferred Stock at a purchase price of $2.15 per share for an aggregate purchase price of approximately $1.75 million, including $0.25 million pursuant to the conversion of convertible notes. In October 2020, LENZ issued warrants to purchase 814,495 shares of its Series A Preferred Stock with an exercise price of $2.15 per share (the "Series A Warrants"). In April 2021, LENZ issued and sold an aggregate of 11,263,447 shares of its Series A Preferred Stock at a purchase price of $2.15 per share for an aggregate purchase price of approximately $24.22 million. In October 2022, LENZ issued and sold an aggregate of 9,899,340 additional shares of its Series A Preferred Stock at a purchase price of $2.15 per share for an aggregate purchase price of approximately $21.28 million.

Purchasers of LENZ's Series A Preferred Stock included certain of its directors and holders of more than 5% of its capital stock at the time of the financing (or subsequent closings of such financing). The following table presents the number of shares and the total purchase price paid by these entities.

Investor	Shares of Series A Preferred Stock	Total Purchase Price	Series A Warrants
McCollum Living Trust(1)	132,521	$ 284,920	32,521
Entities affiliated with RA Capital(2)	10,697,674	$ 23,000,000	348,837
Entities affiliated with Versant Ventures(3)	10,697,674	$ 23,000,000	348,837

(1) James McCollum, a member of the LENZ board of directors, is the trustee of the McCollum Living Trust.
(2) Zach Scheiner, a member of the LENZ board of directors, is an affiliate of RA Capital.
(3) Clare Ozawa, a member of the LENZ board of directors, is an affiliate of Versant Ventures.

Series B Preferred Stock Financing

In March 2023, LENZ issued and sold an aggregate of 28,019,181 shares of its Series B Preferred Stock at a purchase price of $2.9801 per share for an aggregate purchase price of approximately $83.5 million.

Purchasers of LENZ's Series B Preferred Stock included certain of its directors and holders of more than 5% of its capital stock at the time of the financing. The following table presents the number of shares and the total purchase price paid by these entities:

Investor	Shares of Series B Preferred Stock	Total Purchase Price
Alpha Wave Ventures II, LP(1)	13,422,368	$ 39,999,999
Point72 Biotech Private Investments, LLC-Series LT	5,033,388	$ 15,000,000
Entities affiliated with RA Capital(2)	5,033,388	$ 15,000,000
Entities affiliated with Versant Ventures(3)	167,779	$ 499,998
McCollum Living Trust(4)	167,779	$ 499,998
Entities affiliated with RTW	167,779	$ 499,998

(1) Chris Dimitropoulos, a member of the LENZ board of directors, is an affiliate of Alpha Wave Ventures II, LP.
(2) Zach Scheiner, a member of the LENZ board of directors, is an affiliate of RA Capital.
(3) Clare Ozawa, a member of the LENZ board of directors, is an affiliate of Versant Ventures.
(4) James McCollum, a member of the LENZ board of directors, is the trustee of the McCollum Living Trust.

Investors' Rights Agreement

LENZ is party to an amended and restated investors' rights agreement with certain holders of its capital stock, including Alpha Wave Ventures II, LP, Point72 Biotech Private Investments, LLC-Series LT, entities affiliated with Versant Ventures and entities affiliated with RA Capital. Under LENZ's amended and restated investors' rights agreement, certain holders of its capital stock have the right to demand that LENZ file a registration statement or request that their shares of LENZ capital stock be covered by a registration statement that LENZ is otherwise filing. LENZ's amended and restated investors' rights agreement is expected to be terminated in connection with the closing.

Voting Agreement

LENZ is a party to an amended and restated voting agreement, as amended, with certain holders of its capital stock, including, among others, Evert Schimmelpennink, its President, Chief Executive Officer and a member of its board of directors, Shawn Olsson, its Chief Commercial Officer, James McCollum, a member of its board of directors, Marc Odrich, its Chief Medical Officer, Alpha Wave Ventures II, LP, Point72 Biotech Private Investments, LLC-Series LT, entities affiliated with Versant Ventures and entities affiliated with RA Capital. The parties to the voting agreement have agreed, subject to certain conditions, to vote the shares of LENZ capital stock held by them so as to maintain the size of the board of directors at eight (8) and to elect the following individuals as directors: (1) one individual designated by New Emerging Medical Opportunities Fund V SCSp, currently Stefan Larson, (2) one individual designated by Alpha Wave Ventures II, LP, currently Chris Dimitropoulos, (3) one individual designated by Versant Venture Capital VII, L.P., currently Clare Ozawa, (4) one individual designated by RA Capital Healthcare Fund, L.P., currently Zach Scheiner, (5) LENZ's Chief Executive Officer, currently Evert Schimmelpennink, (6) one individual designated by the holders of a majority of the outstanding shares of the LENZ common stock that have been designated "Class A Common Stock" and "Class B Common Stock," voting together as a separate class, currently James McCollum, and (7) two individuals, each of whom (i) has relevant industry experience relating to LENZ's business, (ii) is not an affiliate of LENZ, any investor or any key holder, and (iii) has been approved by a majority of the other members of the LENZ board of directors, currently Frederic Guerard and Shelley Thunen.

Upon the closing, the obligations of the parties to the voting agreement to vote their shares so as to elect these nominees, as well as the other rights and obligations under this agreement, will terminate and none of the LENZ stockholders will have any special rights regarding the nomination, election or designation of members of the board of directors of the combined company pursuant to such agreement. LENZ's existing certificate of incorporation contains provisions regarding election of members of the board of directors that correspond to the

amended and restated voting agreement; however, such provisions will not be included in the certificate of incorporation of the combined company after the closing.

LENZ Indemnification Agreements and Insurance

LENZ has entered, and intends to continue to enter, into separate indemnification agreements with each of its directors and executive officers, in addition to the indemnification provided for in its certificate of incorporation and bylaws. The indemnification agreements and its certificate of incorporation and bylaws generally require LENZ to indemnify its directors, executive officers and certain controlling persons to the fullest extent permitted by Delaware law.

LENZ Policies for Approval of Related Party Transactions

LENZ does not have a written policy regarding the review and approval of related person transactions. Nevertheless, with respect to such transactions, it has been the practice of the LENZ board of directors to consider the nature of and business reasons for such transactions, how the terms of such transactions compared to those which might be obtained from unaffiliated third parties and whether such transactions were otherwise fair to and in the best interests of, or not contrary to, LENZ's best interests.

DESCRIPTION OF GRAPHITE CAPITAL STOCK

The following description of Graphite capital stock and provisions of the Graphite charter and Graphite's bylaws are summaries and are qualified by reference to the Graphite charter and Graphite's bylaws and applicable provisions of Delaware corporate law. Copies of these documents are filed as exhibits to the registration statement of which this prospectus forms a part.

Authorized Capital Stock

Graphite's authorized capital stock consists of 300,000,000 shares of Graphite common stock, par value $0.00001 per share and 10,000,000 shares of Graphite preferred stock, par value $0.00001 per share.

Common Stock

Voting

Holders of Graphite common stock are entitled to one vote for each share of Graphite common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Except as described under "*Anti-Takeover Effects of Delaware Law and Provisions of Graphite's Amended and Restated Certificate of Incorporation and Bylaws*" below, a majority vote of the holders of Graphite common stock is generally required to take action under the Graphite charter and Graphite's bylaws.

Dividends

Holders of Graphite common stock are entitled to receive dividends ratably, if any, as may be declared by the Graphite board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding.

Distributions on Liquidation

Upon Graphite's dissolution, liquidation or winding up, holders of Graphite common stock are entitled to share ratably in Graphite's net assets legally available after the payment of all Graphite's debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding.

Other Rights

Holders of Graphite common stock have no preemptive, subscription, redemption or conversion rights and no sinking fund provisions are applicable to Graphite common stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that Graphite may designate and issue in the future.

Preferred Stock

The Graphite board of directors is authorized, without action by the stockholders, to designate and issue up to an aggregate of 10,000,000 shares of preferred stock in one or more series. The Graphite board of directors can designate the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. The Graphite board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of restricting dividends on Graphite common stock, diluting the voting power of Graphite common stock, impairing the liquidation rights of Graphite common stock, or delaying, deferring or preventing a change in control of

Graphite, which might harm the market price of Graphite common stock. The Graphite board of directors will make any determination to issue such shares based on its judgment as to Graphite's best interests and the best interests of the Graphite stockholders.

Anti-Takeover Effects of Delaware Law and Provisions of Graphite's Amended and Restated Certificate of Incorporation and Bylaws

Certain provisions of the DGCL and of the Graphite charter and Graphite's bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of Graphite. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of Graphite common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of Graphite to first negotiate with the Graphite board of directors. These provisions might also have the effect of preventing changes in Graphite's management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, Graphite believes that the advantages gained by protecting Graphite's ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of the Graphite common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

Graphite is subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the Graphite board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by the Graphite board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

SECURITIES ACT RESTRICTIONS ON RESALE OF GRAPHITE COMMON STOCK

Pursuant to Rule 144 under the Securities Act ("Rule 144"), a person who has beneficially owned restricted Graphite common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been an affiliate of Graphite at the time of, or at any time during the three months preceding, a sale and (ii) Graphite is subject to the Exchange Act periodic reporting requirements for at least three months before the sale and have filed all required reports under Section 13 or 15(d) of the Exchange Act during the twelve months (or such shorter period as Graphite was required to file reports) preceding the sale.

Persons who have beneficially owned restricted Graphite common stock for at least six months but who are affiliates of Graphite at the time of, or at any time during the three months preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of:

- 1% of the total number of Graphite common stock then outstanding; or
- the average weekly reported trading volume of the Graphite common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales by affiliates of Graphite under Rule 144 are also limited by manner of sale provisions and notice requirements and to the availability of current public information about Graphite.

Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies

According to SEC guidance, the requirements applicable to reporting shell company business combinations apply to any company that sells or otherwise disposes of its historical assets or operations in connection with or as part of a plan to combine with a non-shell private company in order to convert the private company into a public one. Graphite has no remaining ongoing development programs and Graphite has disposed of (or is in the process of disposing of) its legacy technology and intellectual property. As such, Graphite is subject to the SEC requirements applicable to reporting shell company business combinations. Rule 144 is not available for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. However, Rule 144 also includes an important exception to this prohibition if the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and material required to be filed, as applicable, during the preceding twelve months (or such shorter period that the issuer was required to file such reports and materials), other than Form 8-K reports; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

We anticipate that following the consummation of the merger, the combined company will no longer be a shell company, and so, once the conditions set forth in the exceptions listed above are satisfied, Rule 144 will become available for the resale of the above noted restricted securities.

COMPARISON OF RIGHTS OF HOLDERS OF GRAPHITE CAPITAL STOCK AND LENZ CAPITAL STOCK

If the merger is completed, LENZ stockholders will receive shares of Graphite common stock, pursuant to the terms of the Merger Agreement. Immediately prior to the closing, assuming that Proposal No. 2 is approved by the Graphite stockholders, the Graphite charter will be amended to effect the reverse stock split and change its name to "LENZ Therapeutics, Inc.", as set forth in the form of certificate of amendment attached as *Annex G* to this proxy statement/prospectus.

Graphite and LENZ are both incorporated under the laws of the State of Delaware. The rights of Graphite stockholders and LENZ stockholders are generally governed by the DGCL. Upon completion of the merger, LENZ stockholders will become Graphite stockholders, and their rights will be governed by the DGCL, the amended and restated bylaws of Graphite, as amended and restated in connection with the merger, and the Graphite charter, as amended in connection with the merger.

The material differences between the current rights of LENZ stockholders under the LENZ amended and restated certificate of incorporation and amended and restated bylaws and their rights as Graphite stockholders, after the merger, under the Graphite charter and the amended and restated bylaws, both as will be in effect immediately following the completion of the merger, are summarized below. The summary below does not purport to be complete and is subject to, and qualified in its entirety by reference to, the DGCL and the governing corporate instruments that are subject to amendment in accordance with their terms. You should carefully read this entire document and the other referenced documents, including the governing corporate instruments, for a more complete understanding of the differences between being a stockholder of Graphite or LENZ before the merger and being a stockholder of the combined company following the completion of the merger. For more information on how to obtain these documents, see the section titled "*Where You Can Find More Information*" beginning on page 432 of this proxy statement/prospectus.

Graphite	LENZ
Organizational Documents	
The rights of Graphite stockholders are governed by the Graphite charter, Graphite's amended and restated bylaws and the DGCL	The rights of LENZ stockholders are governed by LENZ's amended and restated certificate of incorporation, Lenz's amended and restated bylaws and the DGCL.
Authorized Capital Stock	
Graphite is authorized to issue two classes of capital stock which are designated, respectively, "common stock" and "undesignated preferred stock." The total number of shares that Graphite is authorized to issue is 310,000,000, of which 300,000,000 shares are common stock, par value $0.00001 per share, and 10,000,000 shares are undesignated preferred stock, par value $0.00001 per share. Except as otherwise provided in any certificate of designations of any series of Graphite undesignated preferred stock, the number of authorized shares of Graphite undesignated preferred stock or common stock may from time to time be increased or decreased (but not below the number of shares of such class then outstanding) by the affirmative vote of the holders of a majority of the voting power of the outstanding shares of capital stock of Graphite entitled	LENZ is authorized to issue two classes of capital stock which are designated, respectively, "common stock" and "preferred stock." The total number of shares that LENZ is authorized to issue is 81,962,431 shares of common stock, $0.001 par value per share and 53,761,506 shares of preferred stock, $0.001 par value per share. 79,218,247 shares of the authorized common stock are designated "Class A Common Stock" and 2,744,184 shares of the authorized common stock are designated "Class B Common Stock." 22,791,777 shares of the authorized preferred stock are designated "Series A Preferred Stock," 2,950,548 shares of the authorized preferred stock are designated "Series A-1 Preferred Stock" and 28,019,181 shares of the authorized preferred stock are designated "Series B Preferred Stock."

Graphite	LENZ
to vote thereon, irrespective of the provisions of Section 242(b)(2) of the DGCL.	The number of authorized shares of common stock (including the Class A Common Stock and Class B Common Stock) may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of preferred stock that may be required by LENZ's amended and restated certificate of incorporation) the affirmative vote of the holders of shares of capital stock of LENZ representing a majority of the votes represented by all outstanding shares of capital stock of LENZ entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the DGCL.
Common Stock	
Graphite's authorized common stock consists of 300,000,000 shares of common stock, par value $0.00001 per share. Each holder of a share of Graphite common stock is entitled to one vote for each such share held of record on the applicable record date on each matter voted on at a meeting of stockholders; provided, however, that, except as otherwise required by law, holders of common stock, as such, shall not be entitled to vote on any amendment to the Graphite charter (or on any amendment to a certificate of designations of any series of undesignated preferred stock) that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of undesignated preferred stock if the holders of such affected series of undesignated preferred stock are entitled to vote, either separately or together with the holders of one or more other such series, on such amendment pursuant to the Graphite charter (or pursuant to a certificate of designations of any series of undesignated preferred stock) or pursuant to the DGCL.	LENZ's 81,962,431 shares of authorized common stock, $0.001 par value per share, consists of 79,218,247 shares of Class A Common Stock and 2,744,184 shares of Class B Common Stock. Each holder of outstanding shares of LENZ common stock is entitled to one vote for each such share held at all meetings of stockholders (and written actions in lieu of meetings) and, except as otherwise required by law or by the terms of LENZ's amended and restated certificate of incorporation, shall vote together as a single class; provided, however, that, except as otherwise required by law, holders of common stock, as such, are not entitled to vote on any amendment to LENZ's amended and restated certificate of incorporation that relates solely to the terms of one or more outstanding series of preferred stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to LENZ's amended and restated certificate of incorporation or pursuant to the DGCL.
Preferred Stock	
Graphite's authorized preferred stock consists of 10,000,000 shares of undesignated preferred stock. No shares of Graphite undesignated preferred stock are currently outstanding. The Graphite board of directors is authorized to issue shares of undesignated preferred stock in one or more series and to fix the designations, powers, preferences and relative, participating, optional and other rights, and any qualifications, limitations and restrictions, on such shares.	LENZ's 53,761,506 shares of authorized preferred stock, $0.001 par value per share, consists of 22,791,777 shares of Series A Preferred Stock, 2,950,548 shares of Series A-1 Preferred Stock and 28,019,181 shares of Series B Preferred Stock. Each holder of outstanding shares of LENZ preferred stock is entitled to cast the number of votes equal to the number of whole shares of Class A Common Stock into which the shares of preferred stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other

Graphite	LENZ
	provisions in LENZ's amended and restated certificate of incorporation, the holders of preferred stock shall vote together with the holders of common stock as a single class and on an as-converted to Class A Common Stock basis. LENZ's amended and restated certificate of incorporation provides for anti-dilution protection for the holders of preferred stock and for certain consent rights for holders of preferred stock as more fully described below.
Number and Qualification of Directors	
The number of Graphite directors is fixed from time to time by resolution of the Graphite board of directors. The Graphite board of directors currently consists of ten members. No decrease in the authorized number of directors constituting the Graphite board of directors will shorten the term of any incumbent director. Directors of Graphite need not be stockholders of Graphite.	The number of directors of LENZ is determined by resolution of the stockholders or the LENZ board of directors, but in no event shall the number be less than one. The LENZ board of directors currently consists of eight members. Directors of LENZ need not be stockholders of LENZ. At any time when shares of preferred stock are outstanding, the affirmative vote of the holders of a majority of the outstanding shares of preferred stock (voting together as a single class and on an as-converted basis) (the "Requisite Holders"), voting separately as a class, is required to increase or decrease the authorized number of directors constituting the LENZ board of directors. The selection and election of directors is subject to a voting agreement with certain holders of LENZ capital stock.
Structure of Board of Directors; Term of Directors; Election of Directors	
Other than any directors elected by the separate vote of the holders of any series of Graphite undesignated preferred stock, the Graphite board of directors is divided into three classes, designated as Class I, Class II and Class III, respectively. Directors are assigned to each class in accordance with a resolution or resolutions adopted by the Graphite board of directors. At the first annual meeting of stockholders following the effectiveness of the IPO, the term of office of the Class I directors expired and Class I directors were elected for a full term of three years. At the second annual meeting of stockholders following the IPO, the term of office of the Class II directors expired and Class II directors were elected for a full term of three years. At the third annual meeting of stockholders following the IPO, the term of office of the Class III directors will expire and Class III directors will be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors are elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting. Notwithstanding the foregoing, directors elected to each class hold office until their	Pursuant to LENZ's amended and restated certificate of incorporation: (i) the holders of record of the shares of Series B Preferred Stock, exclusively and as a separate series, are entitled to elect two directors of LENZ as the "Series B Directors," (ii) the holders of record of the shares of Series A Preferred Stock, exclusively and as a separate series, are entitled to elect two directors of LENZ as the "Series A Directors," (iii) the holders of record of the shares of Class A Common Stock and Class B Common Stock, exclusively and voting together as a separate series, are entitled to elect two directors of LENZ and (iv) the balance of the total number of directors of LENZ shall be elected by the holders of record of all outstanding classes or series of voting stock of LENZ, voting together as a single class and on an as-converted basis. If the holders of shares of Series B Preferred Stock, Series A Preferred Stock or common stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are

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successors are duly elected and qualified or until their earlier resignation, death or removal.	entitled to elect directors, voting exclusively and as a separate class or series pursuant to the provisions of LENZ's amended and restated certificate of incorporation, then any directorship not so filled shall remain vacant until such time as the holders of the Series B Preferred Stock, Series A Preferred Stock or common stock, as the case may be, elect a person to fill such directorship; and no such directorship may be filled by stockholders of LENZ other than by those stockholders of LENZ that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class or series. The directors are elected at the annual meeting of stockholders by the stockholders that have the right to vote on such election. Each director holds office until the next annual meeting and until such director's successor is elected and qualified, or until such director's earlier death, resignation or removal.
Removal of Directors	
Subject to the rights of the holders of any series of Graphite undesignated preferred stock to elect and remove directors, any director may be removed from office at any time, but only with cause and only by the affirmative vote of the holders of seventy-five percent or more of the outstanding shares of capital stock of Graphite entitled to vote at an election of directors. In the event of a vacancy in the Graphite board of directors, the remaining directors, except as otherwise provided by law, shall exercise the powers of the full board of directors until the vacancy is filled.	Any one or more directors may be removed, with or without cause, by the holders of a majority of the shares of stock then entitled to vote at an election of directors; provided, however, that the directors elected by the holders of a particular class or series of stock may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors.
Vacancies on the Board of Directors	
Any director may resign at any time by giving notice in writing to Graphite Chairperson of the board of directors, if one is elected, the President or the Secretary. Such resignation shall be effective upon receipt, unless the resignation otherwise provides. Subject to the rights of the holders of any series of Graphite undesignated preferred stock, any vacancies and any newly created directorships resulting from any increase in the number of directors, will be filled solely and exclusively by the affirmative vote of a majority of the remaining directors then in office, even if less than a quorum, and not by the Graphite stockholders. Any director elected in accordance with the preceding sentence will hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor is elected	Any director may resign by delivering a written resignation to LENZ at its principal office, or to LENZ's President or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some event. Except as otherwise provided in LENZ's amended and restated certificate of incorporation, unless and until filled by the stockholders, any vacancy in the LENZ board of directors, however occurring, including a vacancy resulting from an enlargement of the LENZ board of directors, may be filled by vote of a majority of the directors then in office, although less than a quorum, or by the sole remaining director; provided, however, that a vacancy in any directorship filled by the holders of any class or series shall be

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and qualified or until his or her earlier resignation, death or removal.	filled only by the vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series entitled to make such elections. A director elected to fill a vacancy is elected for the unexpired term of such director's predecessor in office, and a director elected to fill a vacancy resulting from an enlargement of the LENZ board of directors will hold office until the next annual meeting of stockholders and until such director's successor is elected and qualified, or until such director's earlier death, resignation or removal.
Stockholder Action by Written Consent	
No action may be taken by the Graphite stockholders except at an annual or special meeting of the Graphite stockholders called in accordance with Graphite's amended and restated bylaws, and no action may be taken by the Graphite stockholders by written consent in lieu of a meeting.	Any action required or permitted to be taken at any annual or special meeting of stockholders of LENZ may be taken without a meeting, without prior notice and without a vote if the holders of outstanding stock entitled to vote having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote on such action were present and voted, consent in writing to the action so taken. Prompt notice of corporate action taken without a meeting by less than unanimous written consent will be given to those stockholders who have not consented in writing.
Quorum	
A majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If a quorum fails to attend any meeting, the presiding officer of the meeting or the holders of a majority of the voting power of the shares entitled to vote who are present at the meeting may adjourn the meeting. When any meeting is convened, the presiding officer may also adjourn the meeting if the Graphite board of directors determines that adjournment is necessary or appropriate to enable Graphite stockholders to have additional time to consider information or the Graphite board of directors or presiding officer determines that adjournment is otherwise in the best interests of Graphite.	Except as otherwise provided by law, LENZ's amended and restated certificate of incorporation or LENZ's amended and restated bylaws, the holders of a majority of the shares of the capital stock of LENZ issued and outstanding and entitled to vote at the meeting (or if there are two or more classes of stock entitled to vote as separate classes, then in the case of each such class, the holders of a majority of the shares of such class issued and outstanding and entitled to vote at the meeting), present in person or represented by proxy, will constitute a quorum for the transaction of business.
Special Meetings of Stockholders	
Except as otherwise required by statute and subject to the rights of the holders of any series of Graphite's undesignated preferred stock, special meetings of stockholders may be called only by the Graphite board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in	Special meetings of stockholders may be called at any time by LENZ's President or the LENZ board of directors. Business transacted at special meetings of stockholders is limited to matters relating to the purpose or purposes stated in the notice of the meeting.

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office and special meetings of stockholders may not be called by any other person or persons. The Graphite board of directors will determine the time and place, if any, of such special meeting. Only those matters set forth in the notice of the special meeting shall be considered or acted upon at such special meeting.	
Notice of Stockholder Meetings	
Notice of all meetings of Graphite stockholders shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes of the meeting, and unless otherwise provided in the DGCL, the Graphite charter or Graphite's amended and restated bylaws, shall be given not less than ten nor more than sixty days before the meeting to each stockholder entitled to vote at the meeting as of the record date for determining the stockholders entitled to notice of the meeting. The notice to stockholders for any meeting will be given in accordance with Section 232 of the DGCL.	Except as otherwise provided by law, LENZ's amended and restated certificate of incorporation or LENZ's amended and restated bylaws, written notice of any meeting of stockholders, whether annual or special, will be given not less than ten days nor more than sixty days before the date of the meeting to each stockholder entitled to vote at such meeting. The notices of all meetings shall state the place, date and hour of the meeting and the means of remote communication, if any, by which the stockholders and proxy holders may be deemed to be present in person and vote at the meeting. The notice of a special meeting shall state, in addition, the purpose or purposes for which the meeting is called.
Advance Notice Requirements for Stockholder Proposals	
Nominations of persons for election to the Graphite board of directors and the proposal of business other than nominations to be considered by the stockholders may be brought before an annual meeting of stockholders only (i) by or at the direction of the Graphite board of directors or (ii) by any stockholder of Graphite who is a stockholder of record at the time of giving notice provided for in Graphite's amended and restated bylaws, who is entitled to vote at the annual meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in Graphite's amended and restated bylaws as to such nomination or business. For the avoidance of doubt, the foregoing clause (ii) shall be the exclusive means for a stockholder to bring nominations or business properly before an annual meeting of stockholders (other than matters properly brought under Rule 14a-8 (or any successor rule) under the Exchange Act).	LENZ's amended and restated bylaws do not contain any advance notice requirements for stockholder proposals or nominations.
Amendment of Certificate of Incorporation	
Except as otherwise required by law or the Graphite charter, the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote, and	LENZ's amended and restated certificate of incorporation may be amended by the affirmative vote of the majority of the voting power of the

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the affirmative vote of the majority of the outstanding shares of each class entitled to vote thereon as a class, at a duly constituted meeting of stockholders called expressly for such purpose, will be required to amend provisions of the Graphite charter; provided that the affirmative vote of not less than seventy-five percent of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than seventy-five percent of the outstanding shares of each class entitled to vote thereon as a class, will be required to amend certain provisions of the Graphite charter.	outstanding shares entitled to vote thereon in accordance with Section 242 of the DGCL; provided that (i) at any time when shares of Series B Preferred Stock are outstanding, the affirmative vote of the holders of at least a majority of the outstanding shares of Series B Preferred Stock (the "Series B Majority"), voting separately as a series, is required to amend, alter, waive or repeal any provision of LENZ's amended and restated certificate of incorporation in a manner that adversely affects the powers, preferences or rights of the Series B Preferred Stock and (ii) at any time when shares of preferred stock are outstanding, the affirmative vote of the Requisite Holders, voting separately as a class, is required to amend, alter or repeal any provision of LENZ's amended and restated certificate of incorporation.
Amendment of Bylaws	
Except as otherwise provided by law, Graphite's amended and restated bylaws may be amended or repealed by the board of directors acting pursuant to the affirmative vote of a majority of the directors then in office. Except as otherwise provided in Graphite's amended and restated bylaws, Graphite's amended and restated bylaws may be amended or repealed by the stockholders by the affirmative vote of not less than seventy-five percent of the outstanding shares of capital stock entitled to vote, voting together as a single class; provided, however, that if the Graphite board of directors recommend that stockholders approve such amendment or repeal, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class.	LENZ's amended and restated bylaws may be altered, amended or repealed, and new bylaws may be adopted, by the affirmative vote of (i) a majority of the directors present at any regular or special meeting of the LENZ board of directors at which a quorum is present or (ii) the holders of a majority of the shares of the capital stock of LENZ issued and outstanding, present in person or by proxy, and entitled to vote at any regular meeting of stockholders, or at any special meeting of stockholders, provided that notice of such alteration, amendment, repeal or adoption of new bylaws shall have been stated in the notice of such special meeting. Notwithstanding the foregoing, in either case, provided that (a) at any time when shares of Series B Preferred Stock are outstanding, the affirmative vote of the Series B Majority, voting separately as a series, is required to amend, alter, waive or repeal any provision of LENZ's amended and restated bylaws in a manner that adversely affects the powers, preferences or rights of Series B Preferred Stock and (b) at any time when shares of preferred stock are outstanding, the affirmative vote of the Requisite Holders, voting separately as a class, is required to amend, alter or repeal any provision of LENZ's amended and restated bylaws.
Limitation on Director Liability	
The liability of the Graphite directors to Graphite or its stockholders for monetary damages for breach of fiduciary duty as a director is and will be eliminated to the fullest extent under applicable law. If applicable law	To the fullest extent permitted by law, a director or officer of LENZ shall not be personally liable to LENZ or its stockholders for monetary damages for breach of fiduciary duty as a director or officer. If the

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is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director to Graphite will be eliminated or limited to the fullest extent permitted by applicable law as so amended. Any amendment, repeal or modification of Article VII of the Graphite charter shall not adversely affect any right or protection existing at the time of such amendment, repeal or modification with respect to any acts or omissions occurring before such amendment, repeal or modification of a person serving as a director at the time of such amendment, repeal or modification.	DGCL or any other law of the State of Delaware is amended to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of a director or officer of LENZ shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended. Any amendment, repeal or elimination of Article Ninth of LENZ's amended and restated certificate of incorporation by the stockholders of LENZ will not adversely affect any right or protection of a director or officer of LENZ existing at the time of, or increase the liability of any director or officer of LENZ with respect to any acts or omissions of such director or officer occurring prior to, such amendment, repeal or elimination.
Indemnification	
To the fullest extent permitted by applicable law and subject to the provisions of Graphite's amended and restated bylaws, Graphite is obligated under certain circumstances to provide indemnification of directors and officers of Graphite (and advancement of expenses to directors of Graphite) and is authorized to provide indemnification of other employees and agents of Graphite (and advancement of expenses to officers and other employees and agents) and any other persons to which applicable law permits Graphite to provide indemnification. The foregoing rights to indemnification and advancement of expenses are not limited to the provisions of Graphite's amended and restated bylaws and may be set forth in agreements with such persons or pursuant to vote of stockholders or disinterested directors.	To the fullest extent permitted by the DGCL, LENZ is obligated under certain circumstances to provide indemnification of directors and officers of LENZ and is authorized to provide indemnification of other employees or agents of LENZ (and any other persons to which the DGCL permits LENZ to provide indemnification) through bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 145 of the DGCL. LENZ is further authorized to provide advancement of expenses, to the fullest extent permitted by the DGCL, to such directors, officers, agents and other persons.
Conversion Rights	
Graphite does not have any outstanding shares of undesignated preferred stock.	LENZ's amended and restated certificate of incorporation provides that (i) holders of shares of Class B Common Stock have the right to convert each share of Class B Common Stock into one share of Class A Common Stock at the holders' election in accordance with the terms of LENZ's amended and restated certificate of incorporation and (ii) holders of shares of preferred stock have the right to convert such shares into shares of Class A Common Stock at the holders' election and at a conversion rate determined in accordance with the terms of LENZ's amended and restated certificate of incorporation. In addition, upon the happening of certain events as described in LENZ's amended and restated certificate of incorporation, all outstanding shares of Class B Common Stock and preferred stock will

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	automatically convert into shares of Class A Common Stock at the conversion rates determined in accordance with LENZ's amended and restated certificate of incorporation.
	Right of First Refusal
Graphite does not have a right of first refusal in place.	Subject to the provisions of LENZ's amended and restated bylaws, holders of Class A Common Stock and Class B Common Stock wishing to transfer their shares must first provide LENZ with the right to purchase such shares in accordance with LENZ's amended and restated bylaws. Pursuant to an Amended and Restated Right of First Refusal and Co-Sale Agreement dated March 6, 2023 (the "LENZ ROFR"), certain LENZ stockholders party to the LENZ ROFR, the Key Holders defined therein, wishing to transfer any shares of LENZ capital stock must first provide LENZ with the right to purchase such shares. In such an event, if LENZ does not elect to exercise its right of first refusal, certain LENZ stockholders detailed in the LENZ ROFR, or the Investors defined therein, have a secondary right of first refusal to purchase all or any portion of the shares of LENZ capital stock which are proposed for sale or transfer by the Key Holders.
	Right of Co-Sale
Graphite does not have a right of co-sale in place.	Pursuant to the LENZ ROFR, each Investor has a right of co-sale with respect to the LENZ capital stock proposed to be transferred by any Key Holder which is not earlier purchased by LENZ by exercise of its right of first refusal (as described above) or by any Investor by exercise of their secondary right of first refusal (as described above).
	Preemptive Rights
Graphite stockholders do not have preemptive rights. Thus, if additional shares of Graphite common stock are issued, the current holders of Graphite common stock will own a proportionately smaller interest in a larger number of outstanding shares of common stock to the extent that they do not participate in the additional issuance.	Pursuant to an Amended and Restated Investors' Rights Agreement dated March 6, 2023 (the "LENZ IRA"), if LENZ proposes to offer or sell new securities, LENZ shall first offer such securities to certain holders of capital stock of LENZ, or the Major Investors defined therein. Each of the Major Investors will then have the right to purchase securities in such new offering equal to the proportion of the ownership interest of such Major Investor prior to such offering.
	Distributions to Stockholders
Dividends upon Graphite capital stock, subject to the provisions of Graphite's amended and restated certificate of incorporation and applicable law, if any,	Subject to applicable law and the provisions of LENZ's amended and restated certificate of incorporation, the holders of shares of preferred stock

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may be declared by the Graphite board of directors. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Graphite charter and applicable law. The Graphite board of directors may fix a record date for the determination of holders of Graphite capital stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date may not be more than 60 days prior to the date fixed for the payment thereof.	and Class B Common Stock are entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Class A Common Stock or other securities and rights convertible into or entitling the holder thereof to receive additional shares of Class A Common Stock) on the Class A Common Stock, at the rate of eight percent per annum of the applicable Original Issue Price (as defined in LENZ's amended and restated certificate of incorporation), payable when, as and if declared by the LENZ board of directors. Such dividends are not cumulative. After payment of such dividends, any additional dividends or distributions will be distributed among all holders of common stock and preferred stock in proportion to the number of shares of Class A Common Stock that would be held by each such holder if all shares of Class B Common Stock and preferred stock were converted to Class A Common Stock at the then effective conversion rate calculated in accordance with LENZ's amended and restated certificate of incorporation. The LENZ board of directors may fix a record date for the determination of holders of LENZ capital stock entitled to receive payment of a dividend or distribution declared thereon, which record date is not to precede the date upon which the resolution fixing the record date is adopted, and which record date may not be more than sixty days prior to the date fixed for the payment thereof. In the event of a voluntary or involuntary liquidation, dissolution or winding up of LENZ, or in the case of any Deemed Liquidation Event (as defined in LENZ's amended and restated certificate of incorporation), the holders of shares of preferred stock then outstanding are entitled to be paid, before any payment is made to the holders of common stock, an amount per share equal to one times the applicable Original Issue Price, plus any dividends declared but unpaid thereon. After the payment in full of the amounts required to be paid to the holders of shares of preferred stock, the holders of shares of Class B Common Stock then outstanding are entitled to be paid before any payment is made to the holders of Class A Common Stock, an amount per share equal to one times the Original Issue Price for the Class B Common Stock, plus any dividends declared but unpaid thereon, plus an additional per share amount calculated at a rate per annum equal to ten

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	percent of the Original Issue Price for the Class B Common Stock, compounded annually, and which shall be calculated from the Class B Original Issue Date (as defined in LENZ's amended and restated certificate of incorporation) until the earlier to occur of (i) the date of the Deemed Liquidation Event or (ii) the fifth anniversary of such Class B Original Issue Date. After the payment in full of all amounts required to be paid to the holders of shares of preferred stock and Class B Common Stock, any remaining assets or proceeds available for distribution to LENZ stockholders will be distributed among the holders of the shares of preferred stock, Class B Common Stock and Class A Common Stock, pro rata based on the number of shares held by each such holder (on an as-converted basis); provided, however, that if the aggregate amount which the holders of preferred stock and the holders of Class B Common Stock are entitled to receive under the applicable provisions of LENZ's amended and restated certificate of incorporation exceed two times the applicable Original Issue Price, plus any dividends declared but unpaid thereon (in each case, the "Maximum Participation Amount"), each holder of preferred stock or Class B Common Stock, as applicable, is entitled to receive the greater of (i) the applicable Maximum Participation Amount and (ii) the amount such holder would have received if all shares of such series of preferred stock or Class B Common Stock, as applicable, and all shares of each series of preferred stock that receives a greater amount pursuant to this clause (ii) than clause (i), had been converted into Class A Common Stock immediately prior to such liquidation, dissolution or winding up of LENZ.
Exclusive Forum	
Graphite's amended and restated bylaws provide that unless it consents in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of Graphite, (ii) any action asserting a claim of, or claim based on, a breach of a fiduciary duty owed by any current or former director, stockholder, officer or other employee of Graphite to Graphite or Graphite's stockholders, (iii) any action asserting a claim against Graphite arising pursuant to any provision of the DGCL or the Graphite charter or Graphite's amended and restated bylaws (including the interpretation, validity or enforceability thereof), or (iv) any action asserting a claim governed by the	LENZ's amended and restated certificate of incorporation provides that unless LENZ consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware will be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of LENZ, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of LENZ to LENZ or LENZ stockholders, (iii) any action asserting a claim against LENZ, its directors, officers or employees arising pursuant to any provision of the DGCL or LENZ's amended and restated certificate of incorporation or LENZ's

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internal affairs doctrine. Unless Graphite consents in writing to the selection of an alternative forum, the federal district courts of the United States shall be the sole and exclusive forum for the resolution of any claim asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of Graphite will be deemed to have notice of and to have consented to the forum selection provision of Graphite's amended and restated bylaws.	amended and restated bylaws or (iv) any action asserting a claim against LENZ, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction.
Registration Rights	
Under that certain Amended and Restated Investors' Rights Agreement, dated March 11, 2021, by and among Graphite and certain of its stockholders (the "Graphite IRA"), certain holders of Graphite's capital stock that are party to the Graphite IRA, have certain registration rights, including the right to demand that Graphite file a registration statement, so called "demand" registration rights, or request that their shares be covered by a registration statement that Graphite is otherwise filing, so-called "piggyback" registration rights. The registration rights granted under the Graphite IRA will terminate upon the earlier of (i) such time when all registrable securities could be sold under Rule 144 of the Securities Act or a similar exemption without limitation during a three-month period without registration pursuant to Rule 144 of the Securities Act or (ii) the third anniversary of the IPO.	Under the LENZ IRA, certain holders of LENZ preferred stock that are party to the LENZ IRA have certain registration rights, including the right to demand that LENZ file a registration statement, so called "demand" registration rights, or request that their shares be covered by a registration statement that LENZ is otherwise filing, so-called "piggyback" registration rights.
Stock Transfer Restrictions Applicable to Stockholders	
Shares of Graphite are transferable in the manner prescribed by the DGCL.	Shares of preferred stock, Class A Common Stock and Class B Common Stock are transferable in accordance with applicable law and LENZ's amended and restated bylaws. Pursuant to LENZ's amended and restated bylaws, and subject to LENZ's right of first refusal described above, except for the exempted transfers as provided in LENZ's amended and restated bylaws, no holder of Class A Common Stock or Class B Common Stock may transfer any such shares to (i) any entity which, in the determination of the LENZ board of directors, directly or indirectly competes with LENZ; or (ii) any customer, distributor or supplier of LENZ, if the LENZ board of directors determines that such transfer would result in such customer, distributor or supplier receiving information that would place

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	LENZ at a competitive disadvantage with respect to such customer, distributor or supplier. Further, the holders of shares of Class A Common Stock and Class B Common Stock are subject to certain transfer restrictions in connection with an initial public offering of LENZ's securities as described more fully in LENZ's amended and restated bylaws.

PRINCIPAL STOCKHOLDERS OF GRAPHITE

Except where specifically noted, the following information and all other information contained in this proxy statement/prospectus does not give effect to the proposed reverse stock split described in Proposal No. 2 of this proxy statement/prospectus.

The following table sets forth information, to the extent known by Graphite or ascertainable from public filings, with respect to the beneficial ownership of Graphite common stock as of February 1, 2024, by:

- each of Graphite's directors;
- each of Graphite's named executive officers;
- all of Graphite's directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by Graphite to beneficially own greater than 5% of Graphite's common stock.

The column titled "Shares Beneficially Owned" is based on a total of 58,232,864 shares of the Graphite common stock outstanding as of February 1, 2024.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to the Graphite common stock. Shares of Graphite common stock subject to options that are currently exercisable or exercisable within 60 days of February 1, 2024 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of Graphite common stock beneficially owned by them, subject to community property laws, where applicable. The following table does not reflect any shares of Graphite common stock that such holders have agreed to purchase in the Graphite private placement or any shares of Graphite common stock issuable in respect of securities beneficially owned prior to the closing of the merger.

	Shares beneficially owned	
Name	**Number**	**Percentage**
5% or Greater Stockholders:		
Entities Affiliated with Versant Ventures[1]	16,416,117	28.2%
Entities Affiliated with Samsara BioCapital[2]	8,497,067	14.6%
Entities Affiliated with EcoR1 Capital LLC[3]	8,538,446	14.7%
Matthew Porteus, M.D., Ph.D.[4]	3,548,529	6.1%
Named Executive Officers and Directors:		
Josh Lehrer, M.D.[5]	2,899,270	4.8%
Alethia Young[6]	219,375	*
Kim Drapkin[7]	8,888	*
Perry Karsen[8]	272,851	*
Abraham Bassan[9]	56,666	*
Jerel Davis, Ph.D.[10]	56,666	*
Kristen M. Hege, M.D.[11]	113,585	*
Joseph Jimenez[12]	191,292	*
Matthew Porteus, M.D., Ph.D.[4]	3,548,529	6.1%
Carlo Rizzuto, Ph.D.[13]	56,666	*
Smital Shah[14]	119,467	*
Jo Viney, Ph.D.[15]	113,585	*
All executive officers and directors as a group (12 persons) [16]	7,656,840	12.6%

* Represents beneficial ownership of less than one percent.

(1) Based on Amendment No. 1 to Schedule 13D filed on November 17, 2023. Consists of (i) 14,708,398 shares of Graphite common stock held by Versant Venture Capital VI, L.P., ("Versant VI"), and (ii) 1,707,719 shares of Graphite common stock held by Versant Vantage II, L.P. ("Versant Vantage II", and together with Versant IV, the "Versant Funds"). Versant Ventures VI GP-GP, LLC ("Versant Ventures VI GP-GP") is the general partner of Versant Ventures VI GP, L.P. ("Versant Ventures VI GP"), which is the general partner of Versant VI. Each of Versant Ventures VI GP-GP and Versant Ventures VI GP share voting and dispositive power with respect to the shares held by Versant VI. Versant Vantage II GP-GP, LLC ("Versant Vantage II GP-GP") is the general partner of Versant Vantage II GP, L.P. ("Versant Vantage II GP"), which is the general partner of Versant Vantage II. Each of Versant Vantage II GP and Versant Vantage II GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage II. The address for the Versant Funds is One Sansome Street, Suite 1650, San Francisco, CA 94104.

(2) Based on a Schedule 13G/A filed on February 14, 2023. Consists of (i) 8,459,314 shares of Graphite common stock held by Samsara BioCapital, L.P. ("Samsara LP") and (ii) 37,753 shares of Graphite common stock held by 436, L.P. The general partner of Samsara LP is Samsara BioCapital GP, LLC, or Samsara LLC. The general partner of 436, L.P. is 436, LLC. Voting and dispositive decisions with respect to the shares held by Samsara LP and 436, L.P. are made by Dr. Srinivas Akkaraju, MD, Ph.D., a manager of Samsara GP LLC and 436, LLC, and, accordingly, Dr. Akkaraju may be deemed to beneficially own the shares held by Samsara LP. And 436, L.P. The address of the principal business and office of Samsara LP and 436, L.P. is 628 Middlefield Road, Palo Alto, CA 94301.

(3) Based on a Schedule 13G/A filed on January 9, 2023. Consists of 8,538,446 shares of Graphite common stock held by EcoR1 Capital, LLC ("EcoR1"), EcoR1 Capital Fund Qualified, L.P. ("Qualified Fund") and Oleg Nodelman. The general partner and investment adviser of investment funds, including Qualified Fund, is EcoR1. Mr. Nodelman is the control person of EcoR1. The principal business office of EcoR1, Qualified Fund, and Oleg Nodelman is 357 Tehama Street #3, San Francisco, CA 94103.

(4) Consists of (i) 3,528,529 shares of Graphite common stock held by Dr. Porteus, and (ii) 20,000 shares of Graphite common stock underlying Graphite options directly held by Dr. Porteus exercisable within 60 days of February 1, 2024.

(5) Consists of (i) 1,161,670 shares of Graphite common stock held by Dr. Lehrer, and (ii) 1,737,600 shares of Graphite common stock underlying Graphite options directly held by Dr. Lehrer exercisable within 60 days of February 1, 2024.

(6) Consists of 219,375 shares of Graphite common stock underlying Graphite options held by Ms. Young exercisable within 60 days of February 1, 2024.

(7) Consists of 8,888 shares of Graphite common stock underlying Graphite options held by Ms. Drapkin exercisable within 60 days of February 1, 2024.

(8) Consists of (i) 164,034 shares of common stock held by Mr. Karsen, and (ii) 108,817 shares of Graphite common stock underlying Graphite options directly held by Mr. Karsen exercisable within 60 days of February 1, 2024.

(9) Consists of 56,666 shares of Graphite common stock underlying Graphite options directly held by Mr. Bassan exercisable within 60 days of February 1, 2024. Mr. Bassan, a member of Graphite's board of directors, is a vice president at Samsara BioCapital. Mr. Bassan has no voting or dispositive power over the shares held by the Samsara BioCapital entities referred to in Footnote 2 above.

(10) Consists of 56,666 shares of Graphite common stock underlying Graphite options directly held by Dr. Davis exercisable within 60 days of February 1, 2024. Dr. Davis, a member of Graphite's board of directors, is a Managing Director at Versant Ventures. Dr. Davis has no voting or dispositive power over the shares held by the Versant Ventures entities referred to in Footnote 1 above.

(11) Consists of 113,585 shares of Graphite common stock underlying Graphite options held by Dr. Hege exercisable within 60 days of February 1, 2024.

(12) Consists of (i) 161,941 shares of Graphite common stock held by Mr. Jimenez, and (ii) 29,351 shares of Graphite common stock underlying Graphite options held by Mr. Jimenez exercisable within 60 days of February 1, 2024.

(13) Consists of 56,666 shares of Graphite common stock underlying Graphite options directly held by Dr. Rizzuto exercisable within 60 days of February 1, 2024. Dr. Rizzuto, a member of Graphite's board of directors, is a Partner at Versant Ventures. Dr. Rizzuto has no voting or dispositive power over the shares held by the Versant Ventures entities referred to in Footnote 1 above.

(14) Consists of (i) 5,882 shares of Graphite common stock held by Ms. Shah, and (ii) 113,585 shares of Graphite common stock underlying Graphite options held by Ms. Shah exercisable within 60 days of February 1, 2024.

(15) Consists of 113,585 shares of Graphite common stock underlying Graphite options held by Dr. Viney exercisable within 60 days of February 1, 2024.

(16) Includes the number of shares beneficially owned by Graphite's named executive officers, current executive officers and directors listed in the table above.

PRINCIPAL STOCKHOLDERS OF LENZ

The following table sets forth certain information known to LENZ regarding beneficial ownership of LENZ capital stock on an as converted to common stock basis as of February 1, 2024, for:

- each person or group of affiliated persons, who is known by LENZ to be the beneficial owner of more than 5% of LENZ capital stock;
- each of LENZ's directors;
- each of LENZ's named executive officers; and
- all of LENZ's directors and executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC, and thus it represents sole or shared voting or investment power with respect to LENZ's securities. Unless otherwise indicated, the persons or entities identified in the table have sole voting power and sole investment power with respect to all shares shown as beneficially owned by them, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Section 13(d) and 13(g) of the Exchange Act.

The percentage of beneficial ownership prior to the merger shown in the table is based upon 66,126,208 shares of common stock outstanding as of February 1, 2024, giving effect to the conversion of LENZ's outstanding shares of Class B common stock into 2,744,184 shares of common stock and the conversion of LENZ's outstanding shares of convertible preferred stock into an aggregate of 52,947,011 shares of common stock.

Shares of LENZ common stock subject to stock options that are currently exercisable or exercisable within 60 days of February 1, 2024, and shares issuable upon the exercise of warrants, are deemed to be outstanding and to be beneficially owned by the person holding the stock option and/or warrant, as applicable, for the purpose of computing the percentage ownership of that person. These shares are not deemed outstanding, however, for the purpose of computing the percentage ownership of any other person.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Outstanding Beneficially Owned
Greater than 5% Stockholders:		
Alpha Wave Ventures II, LP (1)	13,422,368	20.3%
Point72 Biotech Private Investments, LLC – Series LT (2)	5,033,388	7.6%
Entities affiliated with RA Capital Management (3)	16,079,899	24.2%
Entities affiliated with Sectoral Asset Management (4)	3,355,591	5.1%
Entities affiliated with Versant Management (5)	11,214,290	16.9%
Named Executive Officers and Directors:		
Evert Schimmelpennink (6)	3,885,723	5.6%
Shawn Olsson (7)	738,654	1.1%
Marc Odrich (8)	821,336	1.2%
Chris Dimitropoulos (9)	13,422,368	20.3%
Frederic Guerard (10)	181,950	*
Stefan Larson (11)	3,355,591	5.1%
James McCollum (12)	2,864,554	4.3%
Clare Ozawa	—	—
Zach Scheiner (13)	16,079,899	24.2%
Shelley Thunen	—	—
All directors and executive officers as a group (10 persons) (14)	41,350,075	57.7%

* Represents beneficial ownership of less than 1%.

(1) Consists of 13,422,368 shares held by Alpha Wave Ventures II, LP. Alpha Wave Ventures GP, Ltd is the general partner of Alpha Wave Ventures II, LP and therefore may be deemed to have beneficial ownership over these shares. The address of Alpha Wave Ventures GP, Ltd is 667 Madison Ave, 19th Floor, New York, New York 10065.

(2) Consists of 5,033,388 shares held by Point72 Biotech Private Investments, LLC – Series LT ("Point72 Biotech"). Differentiated Ventures Investments, LLC ("Differentiated Ventures"), a Delaware limited liability company, is the managing member of Point72 Biotech and may be deemed to share beneficial ownership of the shares held by Point72 Biotech. 72 Investment Holdings, LLC ("72 Investment Holdings"), a Delaware limited liability company, is the sole member of Differentiated Ventures and may be deemed to share beneficial ownership of the shares of which Differentiated Ventures may be deemed to share beneficial ownership. Steven A. Cohen ("Mr. Cohen") is the sole member of 72 Investment Holdings and may be deemed to share beneficial ownership of the shares of which 72 Investment Holdings may be deemed to share beneficial ownership. Each of Differentiated Ventures, 72 Investment Holdings, and Mr. Cohen disclaims beneficial ownership of the shares held by Point72 Biotech. The address for these entities and individuals is: c/o Point72, L.P., 72 Cummings Point Road, Stamford, CT 06902.

(3) Consists of (i) 11,801,699 shares held by RA Capital Healthcare Fund, L.P. ("RACHF"), (ii) 3,114,668 shares held by RA Capital Nexus Fund II, L.P. ("Nexus II"), (iii) 814,695 shares held by a separately managed account (the "Account", and together with RACHF and Nexus II, the "RA Funds"), (iv) 269,945 shares subject to Series A Warrants held by RACHF, (v) 52,326 shares subject to Series A Warrants held by Nexus II, and (vi) 26,566 shares subject to Series A Warrants held by the Account. RA Capital Management, L.P. is the investment manager for the RA Funds. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky, Ph.D. and Rajeev Shah are the managing members. Each of RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by the RA Funds. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such securities, except to the extent of any pecuniary interest therein. The principal business address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(4) Consists of (i) 3,187,812 shares held by New Emerging Medical Opportunities Fund V SCSp ("NEMO V") and (ii) 167,779 shares held by Sectoral DC 9 Limited ("Sectoral DC"). Sectoral Asset Management Inc. ("Sectoral"), is the manager of NEMO V and Sectoral DC and may be deemed to have indirect beneficial ownership of the shares held by NEMO V and Sectoral DC but disclaims beneficial ownership of such securities, except to the extent of their respective pecuniary interest therein, if any. Dr. Stefan Larson, a member of the LENZ board of directors, is a partner of Sectoral. The business address of each of NEMO V, Sectoral DC, Sectoral and Dr. Larson is Sectoral Asset Management, 1010 Sherbrooke St. West, Suite 1610, Montreal, Quebec, Canada H3A 2R7.

(5) Consists of (i) 2,958,477 shares held by Versant Vantage II, L.P. ("Versant Vantage II"), (ii) 7,906,976 shares held by Versant Venture Capital VII, L.P. ("Versant VII"), and (iii) 348,837 shares subject to Series A Warrants held by Versant VII. Versant VII and Versant Vantage II are collectively referred to as the Versant Entities. Versant Vantage II GP-GP, LLC ("Versant Vantage II GP-GP") is the general partner of Versant Vantage II GP, L.P. ("Versant Vantage II GP"), which is the general partner of Versant Vantage II. Each of Versant Vantage II GP and Versant Vantage II GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage II. Versant Ventures VII GP-GP, LLC ("Versant Ventures VII GP-GP") is the general partner of Versant Ventures VII GP, L.P. ("Versant Ventures VII GP"), which is the general partner of Versant VII. Each of Versant Ventures VII GP and Versant Ventures VII GP-GP share voting and dispositive power with respect to the securities held by Versant VII. The address for each of the Versant Entities and individuals is One Sansome Street, Suite 1650, San Francisco, CA 94104.

(6) Consists of shares of LENZ common stock subject to LENZ options held by Mr. Schimmelpennink exercisable within 60 days of February 1, 2024.

(7) Consists of shares of LENZ common stock subject to LENZ options held by Mr. Olsson exercisable within 60 days of February 1, 2024.

(8) Consists of (i) 492,588 shares of LENZ common stock held by Dr. Odrich and (ii) 328,748 shares of LENZ common stock subject to LENZ options held by Dr. Odrich exercisable within 60 days of February 1, 2024.

(9) Consists of the shares of LENZ common stock set forth in footnote 1 above. Mr. Dimitropoulos is a Managing Director at Alpha Wave Global, LP.

(10) Consists of shares of LENZ common stock subject to LENZ options held by Dr. Guerard exercisable within 60 days of February 1, 2024.

(11) Consists of the shares of LENZ common stock set forth in footnote 4 above.

(12) Consists of (i) 2,362,033 shares of LENZ common stock held by the McCollum Living Trust, (ii) 470,000 shares of LENZ common stock held by James McCollum, and (iii) 32,521 shares of LENZ common stock subject to Series A Warrants held by the McCollum Living Trust. Mr. McCollum is a trustee of the McCollum Living Trust and as such has voting and investment control over the shares held by the McCollum Living Trust.

(13) Consists of the shares of LENZ common stock set forth in footnote 3 above. Dr. Scheiner is employed as a principal at RA Capital Management, L.P. Dr. Scheiner disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, if any.

(14) Consists of (i) 35,833,642 shares of LENZ common stock beneficially owned by LENZ's executive officers and directors, (ii) 5,135,075 shares of LENZ common stock subject to LENZ options held by LENZ's executive officers and directors and exercisable within 60 days of February 1, 2024, and (iii) 381,358 shares of LENZ common stock subject to Series A Warrants beneficially owned by LENZ's executive officers and directors.

PRINCIPAL STOCKHOLDERS OF THE COMBINED COMPANY

Except where specifically noted, the following information and all other information contained in this proxy statement/prospectus does not give effect to the proposed reverse stock split described in Proposal No. 2 of this proxy statement/prospectus.

The following table sets forth certain information regarding beneficial ownership of the combined company's common stock immediately after consummation of the merger, assuming the consummation of the merger occurred on February 1, 2024 for: (i) each stockholder expected by Graphite and LENZ to become the beneficial owner of more than 5% of the combined company's outstanding common stock, (ii) each person expected to be a named executive officer of the combined company, (iii) each person expected to be a director of the combined company, and (iv) all of the combined company's expected directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Under those rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power with respect to the securities as well as any shares of common stock that the individual or entity has the right to acquire within 60 days of February 1, 2024 upon the exercise of stock options or other rights. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Except as noted by footnote, and subject to community property laws where applicable, Graphite and LENZ believe, based on the information provided to them, that the persons and entities named in the table below have sole voting and investment power with respect to all common stock shown as beneficially owned by them.

The table lists applicable percentage ownership based on 176,585,766 shares of common stock expected to be outstanding upon consummation of the merger based on the Graphite and LENZ outstanding shares as of February 1, 2024, and an assumed exchange ratio of 1.4135, after giving effect to the Graphite private placement and prior to giving effect to the anticipated Graphite reverse stock split. The number of shares beneficially owned includes shares of common stock that each person has the right to acquire within 60 days, including upon the exercise of stock options and the vesting of restricted stock units. These stock options and restricted stock units shall be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of the combined company's common stock expected to be owned by such person but shall not be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of the combined organization's common stock expected to be owned by any other person.

Immediately after the merger, Graphite securityholders as of immediately prior to the merger are expected to own approximately 30.7% of the outstanding shares of capital stock of the combined company, former LENZ securityholders are expected to own approximately 56.3% of the outstanding shares of capital stock of the combined company and the Graphite shares of common stock purchased in the Graphite private placement are expected to represent approximately 13.0% of the outstanding shares of capital stock of the combined company, subject to certain assumptions, including, but not limited to, Graphite's net cash as of closing being between $115 million and $175 million. The table below assumes that, based on Graphite's and LENZ's capitalization as of November 8, 2023, the exchange ratio is estimated to be equal to approximately 1.4135, prior to giving effect to the anticipated Graphite reverse stock split. The estimated exchange ratio was derived on a fully-diluted basis

as of November 8, 2023, using a stipulated value of LENZ of approximately $231.6 million and of Graphite of approximately $126.5 million.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Outstanding Beneficially Owned
Greater than 5% Stockholders:		
Alpha Wave Ventures II, LP (1)	25,251,544	14.3%
Entities affiliated with Point72 Asset Management (2)	13,161,163	7.5%
Entities affiliated with RA Capital Management (3)	29,705,630	16.8%
Entities affiliated with Versant Management (4)	32,267,514	18.2%
Named Executive Officers and Directors:		
Evert Schimmelpennink (5)	5,492,468	3.0%
Shawn Olsson (6)	1,044,086	*
Marc Odrich (7)	1,160,958	*
Frederic Guerard (8)	257,186	*
James McCollum (9)	4,165,324	2.4%
Zach Scheiner (10)	29,705,630	16.8%
Shelley Thunen	—	—
Jeff George	—	—
Kimberlee C. Drapkin (11)	8,888	*
All directors and executive officers as a group (9 persons) (12)	41,834,540	22.7%

* Represents beneficial ownership of less than 1%.

(1) Consists of (i) 18,972,517 shares set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio, and (ii) 6,279,027 shares of common stock to be purchased by Alpha Wave Ventures II, LP in the Graphite private placement. Alpha Wave Ventures GP, Ltd is the general partner of Alpha Wave Ventures II, LP and therefore may be deemed to have beneficial ownership over these shares. The address of Alpha Wave Ventures GP, Ltd is 667 Madison Ave, 19th Floor, New York, New York 10065.

(2) Consists of (i) 7,114,693 shares set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio, and (ii) 6,046,470 shares of common stock to be purchased by Point72 Associates, LLC ("Point72 Associates") in the Graphite private placement. Differentiated Ventures Investments, LLC ("Differentiated Ventures"), a Delaware limited liability company, is the managing member of Point72 Biotech and may be deemed to share beneficial ownership of the shares held by Point72 Biotech. 72 Investment Holdings, LLC ("72 Investment Holdings"), a Delaware limited liability company, is the sole member of Differentiated Ventures and may be deemed to share beneficial ownership of the shares of which Differentiated Ventures may be deemed to share beneficial ownership. Steven A. Cohen ("Mr. Cohen") is the sole member of 72 Investment Holdings and may be deemed to share beneficial ownership of the shares of which 72 Investment Holdings may be deemed to share beneficial ownership. Each of Differentiated Ventures, 72 Investment Holdings, and Mr. Cohen disclaims beneficial ownership of the shares held by Point72 Biotech except to the extent of their pecuniary interest therein. Pursuant to an investment management agreement, Point72 Asset Management, L.P. ("Point72 Asset Management"), a Delaware limited partnership, maintains investment and voting power with respect to the shares held by Point72 Associates and therefore may be deemed to share beneficial ownership of such shares. Point72 Capital Advisors, Inc. ("Point72 Capital Advisors") a Delaware corporation, is the general partner of Point72 Asset Management and may be deemed to share beneficial ownership of the shares of which Point72 Asset Management may be deemed to share beneficial ownership. Mr. Cohen is the sole member of Point72 Capital Advisors and may be deemed to share beneficial ownership of the shares of which Point72 Capital Advisors may be deemed to share beneficial ownership. Each of Point72 Asset Management, Point72 Capital Advisors and Mr. Cohen disclaims beneficial ownership of the shares held by Point72 Associates. The address for these entities and individuals is c/o Point72, L.P., 72 Cummings Point Road, Stamford, CT 06902.

(3) Consists of (i) 22,728,934 shares set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio, (ii) 6,522,505 shares of common stock to be purchased by RA Capital Healthcare Fund, L.P. in the Graphite private placement and (iii) 454,192 shares of common stock to be purchased by RA Capital Nexus Fund II, L.P. in the Graphite private placement. RA Capital Management, L.P. is the investment manager for the RA Funds. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky, Ph.D. and Rajeev Shah are the managing members. Each of RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by the RA Funds. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such securities, except to the extent of any pecuniary interest therein. The principal business address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(4) Consists of 15,851,397 shares set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio and 16,416,117 shares of Graphite common stock as set forth in the Principal Stockholders of Graphite table. Versant Vantage II GP-GP is the general partner of Versant Vantage II GP, which is the general partner of Versant Vantage II. Each of Versant Vantage II GP and Versant Vantage II GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage II. Versant Ventures VI GP-GP, LLC ("Versant Ventures VI GP-GP") is the general partner of Versant Ventures VI GP, L.P. ("Versant Ventures VI GP"), which is the general partner of Versant VI. Each of Versant Ventures VI GP-GP and Versant Ventures VI GP share voting and dispositive power with respect to the shares held by Versant VI. Versant Ventures VII GP-GP is the general partner of Versant Ventures VII GP, which is the general partner of Versant VII. Each of Versant Ventures VII GP and Versant Ventures VII GP-GP share voting and dispositive power with respect to the securities held by Versant VII. The address for each of the entities mentioned in this footnote is One Sansome Street, Suite 1650, San Francisco, CA 94104.
(5) Consists of the securities held by Mr. Schimmelpennink as set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio.
(6) Consists of the securities held by Mr. Olsson as set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio.
(7) Consists of the securities held by Dr. Odrich as set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio.
(8) Consists of the securities held by Dr. Guerard as set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio.
(9) Consists of (i) the securities beneficially owned by Mr. McCollum as set forth in the Principal Stockholders of LENZ table, after giving effect to the exchange ratio, and (ii) 116,278 shares of common stock to be purchased by the McCollum Living Trust in the Graphite private placement. Mr. McCollum is a trustee of the McCollum Living Trust and as such has voting and investment control over the shares held by the McCollum Living Trust.
(10) Consists of the shares set forth in footnote 3 above. Dr. Scheiner is employed as a principal at RA Capital Management, L.P. Dr. Scheiner disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, if any.
(11) Consists of the securities held by Ms. Drapkin as set forth in the Principal Stockholders of Graphite table.
(12) Consists of (i) 34,028,179 shares of common stock beneficially owned by the combined company's executive officers and directors, (ii) 7,267,313 shares of common stock subject to options held by the combined company's executive officers and directors and exercisable within 60 days of February 1, 2024, and (iii) 539,048 shares of common stock subject to warrants beneficially owned by the combined company's executive officers and directors.

LEGAL MATTERS

Goodwin Procter LLP will pass upon the validity of the Graphite common stock offered by this proxy statement/prospectus. Certain material U.S. federal income tax consequences of the merger will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C. Immediately following the consummation of the merger and the PIPE, an investment partnership comprised of members of, and persons associated with, Wilson Sonsini Goodrich & Rosati, P.C. will own less than 0.1% percent of the combined company's common stock.

EXPERTS

The financial statements of Graphite Bio, Inc. as of December 31, 2022 and 2021, and for each of the two years in the period ended December 31, 2022, included in this proxy statement/prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are included in reliance upon the report of such firm given their authority as experts in accounting and auditing.

The financial statements of Lenz Therapeutics, Inc. as of December 31, 2022 and 2021, and for the years then ended, included in this proxy statement/prospectus, have been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are included in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

Graphite is subject to the informational requirements of the Exchange Act and in accordance therewith, files annual, quarterly and current reports, proxy statements and other information with the SEC electronically, and the SEC maintains a website that contains Graphite's filings as well as reports, proxy and information statements, and other information issuers file electronically with the SEC at *www.sec.gov*.

Graphite also makes available free of charge on or through its website at *www.graphitebio.com*, its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after Graphite electronically files such material with or otherwise furnishes it to the SEC. The website addresses for the SEC and Graphite are inactive textual references and except as specifically incorporated by reference into this proxy statement/prospectus, information on those websites is not part of this proxy statement/ prospectus.

Graphite has filed with the SEC a registration statement on Form S-4, of which this proxy statement/prospectus is a part, under the Securities Act to register the shares of Graphite common stock to be issued to LENZ stockholders in the merger. The registration statement, including the attached annexes, exhibits and schedules, contains additional relevant information about Graphite and Graphite common stock. This proxy statement/prospectus does not contain all of the information set forth in the registration statement because certain parts of the registration statement are omitted in accordance with the rules and regulations of the SEC.

The SEC allows Graphite to "incorporate by reference" information into this proxy statement/prospectus.

Graphite incorporates by reference any documents that it may subsequently file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this proxy statement/prospectus and prior to the date of the Graphite special meeting, other than the portions of such documents not deemed to be filed. Any statement contained in this proxy statement/prospectus or in a document incorporated or deemed to be incorporated by reference in this proxy statement/prospectus is deemed to be modified or superseded to the extent that a statement contained herein or in any subsequently filed document that also is, or is deemed to be, incorporated by reference herein modified or superseded such statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this proxy statement/prospectus.

Graphite has supplied all information contained in this proxy statement/prospectus relating to Graphite and LENZ has supplied all information contained in this proxy statement/prospectus relating to LENZ. If you would like to request documents from Graphite or LENZ, please send a request in writing or by telephone to either Graphite or LENZ at the following addresses:

Graphite Bio, Inc.
611 Gateway Blvd, Suite 120
South San Francisco, CA 94080
Attn: Corporate Secretary
Tel: (650) 484-0886
Email: ir@graphitebio.com

Lenz Therapeutics, Inc.
445 Marine View Ave. STE #320
Del Mar, CA, USA 92014
Attn: Corporate Secretary
Tel: (858) 925-7000
Email: contact@lenz-tx.com

If you are a Graphite stockholder and would like additional copies, without charge, of this proxy statement/ prospectus or if you have questions about the merger, including the procedures for voting your shares, you should contact Graphite's proxy solicitor, Mackenzie Partners, Inc., at the following address and telephone number:

Mackenzie Partners, Inc.
1407 Broadway, 27th Floor
New York, New York 10018
(212) 929-5500
(800) 322-2885
Email: proxy@mackenziepartners.com

STOCKHOLDER PROPOSALS

A stockholder who would like to have a proposal considered for inclusion in Graphite's 2025 proxy statement must submit the proposal in accordance with the procedures outlined in Rule 14a-8 of the Exchange Act so that it is received by Graphite no later than October 23, 2024. However, if the date of the 2025 annual meeting of stockholders is changed by more than 30 days from the date of the previous year's meeting, then the deadline is a reasonable time before Graphite begins to print and send its proxy statement for the 2025 Annual Meeting of Stockholders. SEC rules set standards for eligibility and specify the types of stockholder proposals that may be excluded from a proxy statement. Stockholder proposals should be addressed to 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080, Attention: Corporate Secretary.

If a stockholder wishes to propose a nomination of persons for election to Graphite's board of directors or present a proposal at an annual meeting but does not wish to have the proposal considered for inclusion in Graphite's proxy statement and proxy card, Graphite's bylaws establish an advance notice procedure for such nominations and proposals. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of Graphite's board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely notice in proper form to Graphite's corporate secretary of the stockholder's intention to bring such business before the meeting.

The required notice must be in writing and received by Graphite's corporate secretary at its principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. However, in the event that the date of the annual meeting is advanced by more than 30 days, or delayed by more than 60 days, from the first anniversary of the preceding year's annual meeting, a stockholder's notice must be so received no earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (A) the 90th day prior to such annual meeting and (B) the tenth day following the day on which notice of the date of such annual meeting was mailed or public disclosure of the date of such annual meeting was made, whichever first occurs. For stockholder proposals to be brought before the 2025 annual meeting of stockholders, the required notice must be received by Graphite's corporate secretary at its principal executive offices no earlier than November 14, 2024 and no later than December 14, 2024. Stockholder proposals and the required notice should be addressed to 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080, Attention: Corporate Secretary.

In addition, to comply with the SEC's new universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than Graphite's nominees must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than 60 days prior to the one-year anniversary of Graphite's annual meeting. The proxy to be solicited on behalf of Graphite's board of directors for its 2025 annual meeting of stockholders may confer discretionary authority to vote on any such proposal considered to have been received on a non-timely basis that nonetheless properly comes before Graphite's 2025 annual meeting of stockholders. Stockholders are also advised to review Graphite's bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

Communication with the Directors of Graphite

Any interested party with concerns about Graphite may report such concerns to the Graphite board of directors or the chair of the Graphite board of directors and nominating and corporate governance committee, by submitting a written communication to the attention of such director at the following address:

c/o Graphite Bio, Inc.
Attn: [Director]
611 Gateway Blvd, Suite 120
South San Francisco, CA 94080
United States

You may submit your concern anonymously or confidentially by postal mail. You may also indicate whether you are a stockholder, customer, supplier, or other interested party.

A copy of any such written communication may also be forwarded to Graphite's legal counsel and a copy of such communication may be retained for a reasonable period of time. The director may discuss the matter with Graphite's legal counsel, with independent advisors, with non-management directors, or with Graphite's management, or may take other action or no action as the director determines in good faith, using reasonable judgment, and applying his or her own discretion.

Communications may be forwarded to other directors if they relate to important substantive matters and include suggestions or comments that may be important for other directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances, and matters as to which Graphite tends to receive repetitive or duplicative communications.

Graphite's audit committee oversees the procedures for the receipt, retention, and treatment of complaints received by Graphite regarding accounting, internal accounting controls, or audit matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting, internal accounting controls or auditing matters, or potential violations of the federal securities laws, including any rules and regulations thereunder, or the U.S. Foreign Corrupt Practices Act. Graphite has also established a toll-free telephone number, which is (866) 244-3167, and has established a webform, which can be accessed at *www.whistleblowerservices.com/Graphitetx*, for the reporting of such activity.

Householding of Proxy Statement/Prospectus

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other special meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other special meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

In connection with the Graphite special meeting, a number of brokers with account holders who are Graphite stockholders will be "householding" Graphite's proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once the stockholder has received notice from his or her broker that the broker will be "householding" communications to the stockholder's address, "householding" will continue until the stockholder are notified otherwise or until the stockholder revokes his or her consent. If, at any time, the stockholder no longer wishes to participate in "householding" and would prefer to receive a separate Notice of Internet Availability of Proxy Materials, please notify the broker or Graphite. Direct the written request to Graphite Bio, Inc., Attn: Corporate Secretary, 611 Gateway Blvd, Suite 120, South San Francisco, CA 94080. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy Materials at their addresses and would like to request "householding" of their communications should contact their brokers.

GRAPHITE BIO, INC.
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GRAPHITE BIO, INC. FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Graphite Bio, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Graphite Bio, Inc. (the "Company") as of December 31, 2022 and 2021, the related statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit, and cash flows, for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

San Francisco, California

March 20, 2023

We have served as the Company's auditor since 2021.

Graphite Bio, Inc.
Balance Sheets
(in thousands, except share and per share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 47,730	$ 376,976
Investments in marketable securities, current	220,499	—
Prepaid expenses and other current assets	7,136	4,760
Total current assets	275,365	381,736
Restricted cash	1,716	1,716
Investments in marketable securities, non-current	15,322	—
Property and equipment, net	22,630	6,507
Operating lease right-of-use assets	5,580	11,574
Other assets	1,289	454
Total assets	$ 321,902	$ 401,987
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,608	$ 2,453
Accrued compensation	3,799	2,689
Accrued research costs	720	633
Accrued expenses and other current liabilities	1,871	886
Operating lease liabilities, current	4,045	5,482
Total current liabilities	13,043	12,143
Operating lease liabilities, non-current	1,749	5,794
Other long-term liabilities	10,819	—
Total liabilities	25,611	17,937
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.00001 par value, 10,000,000 shares authorized as of December 31, 2022 and 2021; and no shares issued and outstanding as of December 31, 2022 and 2021	—	—
Common stock, $0.00001 par value, 300,000,000 shares authorized as of December 31, 2022 and December 31, 2021; 58,221,760 and 58,010,823 shares issued and outstanding as of December 31, 2022 and 2021, respectively	1	1
Additional paid-in capital	539,741	525,400
Accumulated other comprehensive loss	(1,048)	—
Accumulated deficit	(242,403)	(141,351)
Total stockholders' equity	296,291	384,050
Total liabilities and stockholders' equity	$ 321,902	$ 401,987

The accompanying notes are an integral part of these financial statements.

Graphite Bio, Inc.
Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)

	Year Ended December 31,	
	2022	2021
Operating expenses:		
Research and development	$ 72,787	$ 37,932
General and administrative	32,852	22,511
Total operating expenses	105,639	60,443
Loss from operations	(105,639)	(60,443)
Other income (expense), net:		
Interest income, net	4,587	24
Change in fair value of the Series A redeemable convertible preferred stock tranche liability	—	(10,341)
Total other income (expense), net	4,587	(10,317)
Net loss	$ (101,052)	$ (70,760)
Unrealized loss on investments in marketable securities	(1,048)	—
Comprehensive loss	$ (102,100)	$ (70,760)
Net loss per share attributable to common stockholders—basic and diluted	$ (1.84)	$ (2.45)
Weighted-average shares used in computing net loss per share—basic and diluted	54,873,675	28,919,255

The accompanying notes are an integral part of these financial statements.

Graphite Bio, Inc.
Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(in thousands, except share data)

	Redeemable Convertible Preferred Stock									
	Series A		Series B		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2020	**30,019,945**	**$ 55,608**	**—**	**$ —**	**10,279,102**	**$ —**	**$ 5,183**	**$ —**	**$ (70,591)**	**$ (65,408)**
Common stock issued upon exercise of options	—	—	—	—	33,906	—	42	—	—	42
Common stock issued upon early exercise of options	—	—	—	—	918,825	—	—	—	—	—
Common stock issued under ESPP	—	—	—	—	39,894	—	306	—	—	306
Issuance of Series A redeemable convertible preferred stock for cash, net of issuance costs of $4	15,000,000	14,997	—	—	—	—	—	—	—	—
Issuance of Series B redeemable convertible preferred stock for cash, net of issuance costs of $226	—	—	29,792,487	150,524	—	—	—	—	—	—
Reclassification of tranche liability upon settlement	—	39,403	—	—	—	—	—	—	—	—
Issuance of common stock in connection with License Agreement with Stanford	—	—	—	—	640,861	—	—	—	—	—
Repurchase of common stock in connection with terms of License Agreement with Stanford	—	—	—	—	(624,845)	—	—	—	—	—
Issuance of common stock upon initial public offering, net of issuance costs	—	—	—	—	16,100,000	—	251,323	—	—	251,323
Conversion of redeemable convertible preferred stock to common stock at closing of initial public offering	(45,019,945)	(110,008)	(29,792,487)	(150,524)	30,761,676	1	260,531	—	—	260,532
Vesting of early exercised shares	—	—	—	—	—	—	144	—	—	144
Repurchase of unvested early exercised shares	—	—	—	—	(138,596)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	7,871	—	—	7,871
Net loss	—	—	—	—	—	—	—	—	(70,760)	(70,760)
Balance at December 31, 2021	**—**	**$ —**	**—**	**$ —**	**58,010,823**	**$ 1**	**$ 525,400**	**$ —**	**$ (141,351)**	**$ 384,050**
Common shares issued upon exercise of options	—	—	—	—	67,196	—	20	—	—	20
Common shares issued under ESPP	—	—	—	—	333,155	—	656	—	—	656
Vesting of early exercised shares	—	—	—	—	—	—	131	—	—	131
Repurchase of unvested early exercised shares	—	—	—	—	(189,414)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	13,534	—	—	13,534
Unrealized loss on investments in marketable securities	—	—	—	—	—	—	—	(1,048)	—	(1,048)
Net loss	—	—	—	—	—	—	—	—	(101,052)	(101,052)
Balance at December 31, 2022	**—**	**$ —**	**—**	**$ —**	**58,221,760**	**$ 1**	**$ 539,741**	**$ (1,048)**	**$ (242,403)**	**$ 296,291**

The accompanying notes are an integral part of these financial statements.

Graphite Bio, Inc.
Statements of Cash Flows
(in thousands)

	Year Ended December 31,	
	2022	2021
Cash flows from operating activities:		
Net loss	$ (101,052)	$ (70,760)
Adjustments to reconcile net loss to net cash used in operating activities:		
Net amortization of premiums and discounts on investments in marketable securities	(1,600)	—
Depreciation and amortization	2,352	734
Noncash lease expense	5,994	1,460
Stock-based compensation expense	13,534	7,871
Change in fair value of the Series A redeemable convertible preferred stock tranche liability	—	10,341
Changes in assets and liabilities:		
Prepaid expenses and other current assets and other assets	(3,211)	(3,914)
Accounts payable	194	1,825
Accrued compensation	1,110	2,223
Accrued research costs	87	(1,131)
Accrued expenses and other current liabilities and other liabilities	94	257
Operating lease liabilities	(5,482)	(1,758)
Net cash used in operating activities	(87,980)	(52,852)
Cash flows from investing activities:		
Purchases of property and equipment	(6,594)	(5,740)
Purchases of investments in marketable securities	(405,519)	—
Proceeds from maturities of marketable securities	170,250	—
Net cash used in investing activities	(241,863)	(5,740)
Cash flows from financing activities:		
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	—	165,521
Proceeds from initial public offering, net of issuance costs	—	251,323
Proceeds from issuance of common stock upon exercise of vested stock options	20	28
Proceeds from employee stock purchase plan	656	306
Proceeds from issuance of common stock upon early exercises of stock options	—	289
Repurchase of unvested early exercised shares	(79)	—
Net cash provided by financing activities	597	417,467
Net increase (decrease) in cash, cash equivalents and restricted cash	(329,246)	358,875
Cash, cash equivalents and restricted cash, at beginning of period	378,692	19,817
Cash, cash equivalents and restricted cash, at end of period	$ 49,446	$ 378,692
Reconciliation of cash, cash equivalents and restricted cash to statement of financial position:		
Cash and cash equivalents	47,730	376,976
Restricted cash	1,716	1,716
Cash, cash equivalents and restricted cash in statement of financial position	$ 49,446	$ 378,692
Supplemental disclosures of non-cash investing and financing information:		
Conversion of redeemable convertible preferred stock to common stock at closing of initial public offering	$ —	$ 260,532
Property and equipment purchases in accounts payable and accrued expenses	$ (36)	$ (75)
Settlement of redeemable convertible preferred stock tranche liability	$ —	$ (39,403)
Additions to right-of-use assets from new operating lease liabilities	$ —	$ 13,034
Lessor funded lease incentives included in property and equipment	$ 11,920	$ —
Vesting of early exercised stock options	$ 131	$ 144
Repurchase of unvested early exercised shares included in accounts payable	$ (17)	$ (42)
Proceeds from issuance of common stock upon exercise of stock options included in accounts receivable	$	$ (14)

The accompanying notes are an integral part of these financial statements.

Graphite Bio, Inc.
Notes to Financial Statements

1. Description of Business, Organization and Liquidity

Organization and Business

Graphite Bio, Inc. (the "Company") is a clinical-stage, next-generation gene editing company harnessing high-efficiency targeted gene integration to develop a new class of therapies to potentially cure a wide range of serious and life-threatening diseases. The Company is pioneering a precision gene editing approach to achieve one of medicine's most elusive goals: to precisely "find & replace" any gene in the genome. The Company's next-generation gene editing platform was designed to allow the Company to precisely correct mutations, replace entire disease-causing genes with normal genes, or insert new genes into predetermined, safe locations. In January 2023, the Company announced a voluntary pause of our Phase 1/2 CEDAR study of nulabeglogene autogedtemcel (nula-cel, formerly GPH101), its lead product candidate for sickle cell disease (SCD), due to a serious adverse event in the first patient dosed, which the Company concluded is likely related to study treatment. Nula-cel is a highly differentiated approach with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin (HgbA) expression. In February 2023, the Company announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives. From its inception in 2017, the Company's primary activities have been to perform research and development, undertake preclinical studies and enable manufacturing activities in support of its product development efforts, organize and staff the Company, establish its intellectual property portfolio, and raise capital to support and expand such activities.

The Company was incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc., and was reincorporated in the State of Delaware in October 2019. In February 2020, the Company changed its name to Integral Medicines, Inc., and again in August 2020, changed the name to Graphite Bio, Inc. Research and development of the Company's initial technology ceased at the end of 2018, and the Company did not have any significant operations or any research and development activities in 2019. In March 2020, the Company identified new gene editing technology which the Company sought to further develop, and the Company licensed the related intellectual property rights from The Board of Trustees of the Leland Stanford Junior University ("Stanford") in December 2020 (Note 6).

Reverse Stock Split

On June 18, 2021, the Company's board of directors approved an amendment to the Company's amended and restated certificate of incorporation to effect a reverse stock split of the Company's issued and outstanding common stock at a 1 for 2.432 ratio, which was effected on June 21, 2021. The par value and authorized shares of common stock and convertible preferred stock were not adjusted as a result of the reverse stock split. All issued and outstanding common stock, options to purchase common stock and per share amounts contained in the financial statements have been retroactively adjusted to reflect the reverse stock split for all periods presented. The financial statements have also been retroactively adjusted to reflect a proportional adjustment to the conversion ratio for each series of preferred stock that was effected in connection with the reverse stock split.

Initial Public Offering

On June 24, 2021, the Company's registration statement on Form S-1 relating to its initial public offering ("IPO") was declared effective by the Securities and Exchange Commission ("SEC") and the shares of its common stock began trading on the Nasdaq Global Market on June 25, 2021. The IPO closed on June 29, 2021, pursuant to which the Company issued and sold 14,000,000 shares of its common stock at a public offering price of $17.00 per share. On July 2, 2021, the Company issued 2,100,000 shares of its common stock to the underwriters of the IPO pursuant to the full exercise of their option to purchase additional shares. The Company received in June and July 2021 net proceeds of approximately $251.3 million from the IPO, after deducting

underwriting discounts and commissions of $19.1 million and offering costs of approximately $3.2 million. Prior to the completion of the IPO, all shares of redeemable convertible preferred stock then outstanding were converted into 30,761,676 shares of common stock.

Liquidity Matters

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. The Company's operations have historically been financed through the issuance of common and redeemable convertible preferred stock. The Company has incurred significant operating losses and negative net cash flows from operations since inception. During the year ended December 31, 2022, the Company incurred a net loss of $101.1 million and had negative net cash flows from operating activities of $88 million. The Company had an accumulated deficit of $242.4 million as of December 31, 2022 and will continue to require substantial additional capital for research and development activities. The Company anticipates incurring additional losses until such time, if ever, that it can generate significant sales of its drug candidates currently in development. As of December 31, 2022, the Company had cash and cash equivalents and investments in marketable securities of $283.6 million.

On July 21, 2022, the Company filed a shelf registration statement on Form S-3 (the "2022 Shelf") with the SEC in relation to the registration of up to an aggregate offering price of $300.0 million of common stock, preferred stock, debt securities, warrants and units or any combination thereof. The Company also simultaneously entered into a Controlled Equity Offering^{SM} Sales Agreement with Cantor Fitzgerald & Co. (the "Sales Agent"), to provide for the offering, issuance and sale by the Company of up to an aggregate of $75.0 million of its common stock from time to time in "at-the-market" offerings under the 2022 Shelf and subject to the limitations thereof (the "Sales Agreement"). The Company will pay to the Sales Agent cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the Sales Agreement. The Company has not issued any shares or received any proceeds from any offerings under the 2022 Shelf through March 15, 2023.

Management believes that its existing cash, cash equivalents and investments in marketable securities are sufficient to continue operating activities for at least 12 months following the issuance date of these financial statements.

2. Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of expenses during the reporting period. On an ongoing basis, the Company evaluates estimates and assumptions, including but not limited to those related to the fair value of the marketable securities, the fair value of redeemable convertible preferred stock and common stock, stock-based compensation expense, accruals for research and development costs, lease assets and liabilities, the valuation of deferred tax assets, and uncertain income tax positions. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Concentration of Credit Risk

Cash and cash equivalents are financial instruments that potentially subject the Company to concentrations of credit risk. Substantially all of the Company's cash and cash equivalents are deposited in accounts with major financial institution and amounts may exceed federally insured limits. Management believes that the Company is not exposed to significant credit risk due to the financial strength of the depository institution in which the cash and cash equivalents are held. The Company has not experienced any losses on deposits of cash and cash equivalents.

Risks and Uncertainties

The Company is subject to certain risks and uncertainties, including, but not limited to, changes in any of the following areas that the Company believes could have a material adverse effect on the future financial position or results of operations: the timing of, and the Company's ability to advance its current and future product candidates into and through clinical development; costs and timelines associated with the manufacture of clinical supplies of the Company's product candidates; regulatory approval and market acceptance of, and reimbursement for its product candidates; performance of third-party CROs and CMOs; competition from pharmaceutical companies with greater financial resources or expertise; protection of the intellectual property; litigation or claims against the Company based on intellectual property or other factors; and its ability to attract and retain employees necessary to support its growth. Disruption from CROs', CMOs' or suppliers' operations would likely have a negative impact on the Company's business, financial position and results of operations.

Segment and Geographical Information

The Company operates and manages its business as one reportable and operating segment. The chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for purposes of allocating resources and evaluating financial performance. All of the Company's long-lived assets are based in the United States.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with a maturity of three months or less at the date of purchase to be cash equivalents. As of December 31, 2022 and 2021, cash and cash equivalents consisted of cash, money market funds, and commercial paper.

Restricted Cash

Restricted cash of $1.7 million as of December 31, 2022 and 2021 represented security deposits in the form of letters of credit issued in connection with the leases of the Company's headquarters (Notes 6 and 8).

Marketable Securities

The Company's marketable securities are accounted for as available-for-sale and recorded at fair value with the related unrealized gains and losses included in accumulated other comprehensive gain (loss).

The Company reviews its investment portfolio to identify and evaluate investments that have an indication of possible other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based

measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. The carrying amounts of financial instruments, including restricted cash, prepaid expenses and other current assets, accounts payable, accrued compensation, accrued expenses, and other liabilities, approximate fair value due to their short-term maturities. The cash invested in money-market funds and redeemable convertible preferred stock tranche liability are carried at fair value.

Property and Equipment, Net

Property and equipment are recorded at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, generally three to five years. Repairs and maintenance expenditures, which are not considered improvements and do not extend the useful life of property and equipment, are expensed as incurred. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in the statements of operations and comprehensive loss in the period realized.

Leases

Effective January 1, 2021, the Company adopted ASC Topic 842, *Leases* ("ASC 842") using the optional transition method and applied the standard only to leases that existed at that date. Under the optional transition method, the Company does not need to restate the comparative periods in transition and will continue to present financial information and disclosures for periods before January 1, 2021 in accordance with ASC Topic 840. The Company has elected the package of practical expedients allowed under ASC Topic 842, which permits the Company to account for its existing operating leases as operating leases under the new guidance, without reassessing the Company's prior conclusions about lease identification, lease classification and initial direct cost. As a result of the adoption of the new lease accounting guidance on January 1, 2021, the Company recognized no cumulative adjustment to accumulated deficit since the Company had only one operating lease with a term of less than 12 months and no plans to extend the lease.

On January 27, 2021, the Company entered into a lease agreement for office and lab space in South San Francisco, CA that included two office suites. The lease terms for the office suites commenced in July and August 2021, respectively. Upon commencement of the leases, the Company recognized operating lease right-of-use assets of $4.1 million and operating lease liabilities of $4.1 million (see Note 8).

On August 30, 2021, the Company entered into a service agreement with The Laboratory for Cell and Gene Medicine ("LCGM") that included an embedded operating lease as the manufacturing suite in LCGM's facility is designated for the Company's exclusive use though April 30, 2023. Upon commencement of the agreement, the Company recognized operating lease right-of-use assets of $5.3 million and operating lease liabilities of $5.3 million (see Notes 6 and 8).

On November 10, 2021, the Company entered into a sublease agreement for office space in Brisbane, CA. The lease terms for the sublease commenced in December 2021. Upon commencement of the lease, the Company recognized operating lease right-of-use assets of $3.2 million and operating lease liabilities of $3.2 million (see Note 8).

On November 17, 2021, the Company entered into a service agreement with Explora BioLabs, Inc ("Explora") that included an embedded operating lease as the vivarium space is designated for the Company's exclusive use through November 2023. Upon commencement of the lease, the Company recognized operating lease right-of-use assets of $0.6 million and operating lease liabilities of $0.6 million (see Note 8).

The Company determines the initial classification and measurement of its right-of-use assets and lease liabilities at the lease commencement date and thereafter if modified. The lease term includes any renewal options and termination options that the Company is reasonably assured to exercise. The present value of lease

payments is determined by using the interest rate implicit in the lease, if that rate is readily determinable; otherwise, the Company uses its incremental borrowing rate. The incremental borrowing rate is determined by using the rate of interest that the Company would pay to borrow on a collateralized basis an amount equal to the lease payments for a similar term and in a similar economic environment.

Fixed lease expense for operating leases is recognized on a straight-line basis, unless the right-of-use assets have been impaired, over the reasonably assured lease term based on the total lease payments and is included in operating expenses in the statements of operations and comprehensive loss. Variable lease expenses are recognized as incurred. Fixed and variable lease expense on operating leases is recognized within operating expenses in the statements of operations and comprehensive loss.

For operating leases for which the right-of-use assets have been impaired, the Company will recognize the amortization of the right-of-use assets on a straight-line basis over the remaining respective lease term with lease expense included in operating expenses in the statements of operations and comprehensive loss.

For all leases, rent payments that are based on a fixed index or rate at the lease commencement date are included in the measurement of lease assets and lease liabilities at the lease commencement date.

The Company has elected the practical expedient to not separate lease and non-lease components. The Company's non-lease components are primarily related to maintenance, insurance and taxes, which varies based on future outcomes and is thus recognized in lease expense when incurred.

Asset Acquisitions

The Company measures and recognizes asset acquisitions that are not deemed to be business combinations based on the cost to acquire the assets, which includes transaction costs. Goodwill is not recognized in asset acquisitions. In an asset acquisition, the cost allocated to acquire in-process research and development ("IPR&D") with no alternative future use is charged to research and development expense at the acquisition date. Please refer to Note 6 for more details on asset acquisition.

Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparing the carrying amount to the future undiscounted net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows generated by the assets. There have been no such impairments of long-lived assets in the years ended December 31, 2022 and 2021.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development costs include salaries, stock-based compensation, and benefits for employees performing research and development activities, an allocation of facility and overhead expenses, expenses incurred under agreements with consultants, CMOs, CROs and investigative sites that conduct preclinical studies, other supplies and costs associated with product development efforts, preclinical activities, and regulatory operations.

Accrued Research and Development Expenses

The Company has entered into various agreements with outsourced vendors, CROs and CMOs. Research and development accruals are estimated based on the level of services performed, progress of the studies, including the phase or completion of events, and contracted costs. The estimated costs of research and

development services provided, but not yet invoiced, are included in accrued research costs on the balance sheets. If the actual timing of the performance of services or the level of effort varies from the original estimates, the Company will adjust the accrual accordingly. Payments made under these arrangements in advance of the performance of the related services are recorded as prepaid expenses and other current assets until the services are rendered. To date, there have been no material differences between estimates of such expenses and the amounts actually incurred.

Tax Credit Receivable

The Company is eligible for federal and California research and development credits for its research and development activities performed within the United States and California, respectively. The credits are, generally, available to offset federal and California income tax liabilities as applicable. The Company has applied $0.1 million of federal research and development credits to offset its federal payroll tax expenses as of the year ended December 31, 2022 due to its small business status. The Company is electing to utilize $0.3 million of current year R&D credit generated against the employer portion of the payroll tax.

Income Taxes

The Company accounts for income taxes using the asset and liability method. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse.

In evaluating the ability to recover deferred income tax assets, the Company considers all available positive and negative evidence, including operating results, ongoing tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. In the event the Company determines that it would be able to realize deferred income tax assets in the future in excess of their net recorded amount, the Company would make an adjustment to the valuation allowance that would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period when such determination is made. As of December 31, 2022 and 2021, the Company has recorded a full valuation allowance on deferred tax assets.

Tax benefits related to uncertain tax positions are recognized when it is more likely than not that a tax position will be sustained during an audit. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax.

Stock-Based Compensation Expense

The Company's stock-based equity awards include restricted stock awards and stock options that are granted to employees and consultants that are accounted at fair value on the award grant date. Stock-based compensation expense is recognized over the awards' vesting period on a straight-line basis and recorded as either research and development or general and administrative expenses in the statements of operations and comprehensive loss based on the function to which the related services are provided. Forfeitures are accounted for as they occur.

As there was no public market for the Company's common stock prior to the initial public offering of its common stock in June 2021, the estimated fair value of common stock was determined by the Company's board of directors as of the date of each option grant, with input from management, considering third-party valuations of its common stock, as well as the Company's board of directors' assessment of additional objective and subjective factors that it believed were relevant, and which may have changed from the date of the most recent third-party valuation through the date of the grant. These third-party valuations were performed in accordance

with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately Held Company Equity Securities Issued as Compensation. Following the closing of the initial public offering, the fair value of the Company's common stock is determined based on the quoted market price of common stock. The Company also lacks company-specific historical and implied volatility information for its stock. The Company estimates its expected stock price volatility and expected term based on the historical volatility and expected term of publicly traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. There is no expected dividend yield since the Company has never paid cash dividends on common stock and does not expect to pay any cash dividends in the foreseeable future.

Employee Stock Purchase Plan

The Company recognizes stock-based expense related to shares issued pursuant to its Employee Stock Purchase Plan on a straight-line basis over the offering period, which is typically 6 months. The first offering period commenced on June 25, 2021 and ended on November 30, 2021. The second, third, and fourth offering periods commenced on December 1, 2021, June 1, 2022, and December 1, 2022, respectively. The ESPP allows eligible employees to purchase shares of the Company's common stock at a 15 percent discount on the lower price of either (i) the offering period begin date or (ii) the purchase date. The Company estimates the fair value of shares to be issued under the ESPP using the Black-Scholes option-pricing model.

Comprehensive Loss

Comprehensive loss is defined as the change in equity of a business during a period from transactions and other events and circumstances from non-owner sources. Comprehensive loss includes net loss as well as other changes in stockholders' deficit which includes certain changes in equity that are excluded from net loss. The Company's only element of other comprehensive loss is unrealized gains and losses on marketable securities.

Net Loss Per Share

Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common stock outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, redeemable convertible preferred stock, common stock subject to repurchase, restricted common shares issued, and stock options are considered to be potentially dilutive securities.

Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities. Restricted shares issued to the founders and upon early exercise of stock options also participate in dividends from the issuance date and are considered participating securities. Participating securities do not have a contractual obligation to share in losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per common share is the same as basic net loss per common share for those periods.

Adopted and Recent Accounting Pronouncements

The Company is a smaller reporting company and an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay the adoption of new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Thus, the Company has elected to use the extended

transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) the Company is no longer an emerging growth company or (ii) the Company affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. However as described below, the Company early adopted certain accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is permitted.

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *Credit Losses*. The FASB also issued amendments and the initial ASU, and all updates are included herein as the Credit Losses standard or Topic 326. The new standard updates the guidance for measuring and recording credit losses on financial assets measured at amortized cost by replacing the "incurred loss" model with an "expected loss" model. As a result of adoption, the Company would present these financial assets, which includes available-for-sale debt securities, at the net amount it expects to collect. The amendment also requires that the Company records credit losses related to its available-for-sale debt securities as an allowance through net income rather than reducing the carrying amount under the historical, other-than-temporary-impairment model. With certain exceptions, the guidance is applied using a modified retrospective approach by reflecting adjustments through a cumulative-effect impact to retained earnings as of the beginning of the fiscal year of adoption. The Company early adopted the new standard under the modified retrospective approach as of January 1, 2022 with no material impact on its financial statements.

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity (ASU 2020-06)*, which simplifies the accounting for convertible instruments by reducing the number of accounting models available for convertible debt instruments. This guidance also eliminates the treasury stock method to calculate diluted earnings per share for convertible instruments and requires the use of the if-converted method. The Company adopted this standard as of January 1, 2022 utilizing the modified retrospective method, with no material impact on its financial statements. The Company does not have any convertible instruments as of December 31, 2022.

3. Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the balance sheets, as well as assets and liabilities measured at fair value on a non-recurring basis or disclosed at fair value, are categorized based upon the level of judgment associated with inputs used to measure their fair values. The accounting guidance for fair value provides a framework for measuring fair value and requires certain disclosures about how fair value is determined. Fair value is defined as the price that would be received upon the sale of an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date.

The accounting guidance also establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1 — Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 — Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 — Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. An assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability. Changes in the ability to observe valuation inputs may result in a reclassification of levels of certain securities within the fair value hierarchy. The Company recognizes transfers into and out of levels within the fair value hierarchy in the period in which the actual event or change in circumstances that caused the transfer occurs.

As of December 31, 2022 and 2021, Level 1 securities consist of U.S. Treasury and money market funds, for which the carrying amounts are based on the quoted market prices in active markets

As of December 31, 2022, Level 2 securities consist of highly rated commercial paper, U.S. agency securities, and asset-backed securities, for which fair value is determined through the use of models or other valuation methodologies. As of December 31, 2022, the Company had an immaterial amount of unrealized gains on its Level 2 securities.

During the periods presented, the Company did not have any Level 3 securities.

The following tables set forth the financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy as of December 31, 2022 and 2021 (in thousands):

	December 31, 2022			
	Total Fair Value	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds (1)	$ 45,739	$ 45,739	$ —	$ —
Commercial paper (1)	1,991	—	1,991	—
Total cash equivalents	47,730	45,739	1,991	—
Marketable securities:				
U.S. treasuries	65,391	65,391	—	—
Commercial paper	115,061	—	115,061	—
U.S. agency securities(2)	53,455	—	53,455	—
Asset-backed securities(2)	1,914	—	1,914	—
Total marketable securities	235,821	65,391	170,430	—
Total cash equivalents and marketable securities	$283,551	$111,130	$172,421	$ —

	December 31, 2021			
	Total Fair Value	Level 1	Level 2	Level 3
Money market funds (1)	$376,976	$376,976	$ —	$ —

(1) Included within cash and cash equivalents on the balance sheet.(2)Included within investments in marketable securities, current and investments in marketable securities, non-current on the balance sheet.

4. Marketable Securities

All marketable securities were considered available-for-sale as of December 31, 2022. The amortized cost, gross unrealized holding gains or losses, and fair value of the Company's marketable securities by major security type are summarized in the table below (in thousands):

	December 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Available-for-sale securities				
U.S. treasuries	$ 65,807	$ —	$ (416)	$ 65,391
Commercial paper	115,381	13	(333)	115,061
U.S. agency securities	53,767	15	(327)	53,455
Asset-backed securities	1,914	—	—	1,914
Total available-for-sale securities	$236,869	$ 28	$ (1,076)	$235,821

The amortized cost of available-for-sale securities is adjusted for amortization of premiums and accretion of discounts to maturity. As of December 31, 2022, the aggregate fair value of securities with remaining maturities of less than one year held by the Company in an unrealized loss position was $220.5 million. The aggregate fair value of securities with remaining maturities of more than one year held by the Company in an unrealized loss position was $15.3 million. The Company has the intent and ability to hold such securities until recovery and has determined that there has been no material change to its credit risk. As a result, the Company determined it did not hold any investments with a credit loss at December 31, 2022.

There were no realized gains or losses recognized on the sale or maturity of available-for-sale securities during year ended December 31, 2021, and as a result, there were no reclassifications out of accumulated other comprehensive gain (loss) for the same periods.

The Company did not hold any marketable securities as of December 31, 2021.

5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets as of December 31, 2022 and 2021 consisted of the following (in thousands):

	December 31, 2022	December 31, 2021
Advances to suppliers	$ 2,486	$ 1,834
Prepaid insurance	1,343	1,543
Other prepaid expenses	3,307	1,383
Total prepaid expenses and other current assets	$ 7,136	$ 4,760

Property and Equipment, Net

Property and equipment, net as of December 31, 2022 and 2021 consisted of the following (in thousands):

	December 31, 2022	December 31, 2021
Furniture and fixtures	$ 321	$ 3
Computers and network equipment	251	108
Lab equipment	12,521	6,680
Leasehold improvements	304	94
Construction-in-progress	12,440	477
Total property and equipment	25,837	7,362
Less: accumulated depreciation	(3,207)	(855)
Total property and equipment, net	$ 22,630	$ 6,507

Depreciation expense for the years ended December 31, 2022 and 2021 was $2.4 and $0.7 million, respectively.

Accrued Expenses

Accrued expenses as of December 31, 2022 and 2021 consisted of the following (in thousands):

	December 31, 2022	December 31, 2021
Professional fees	$ 367	$ 186
Early exercise liability	150	337
Other accrued expenses	1,354	363
Total accrued expenses and other current liabilities	$ 1,871	$ 886

6. Significant Agreements

Stanford Exclusive License Agreement

In December 2020, the Company entered into an exclusive license agreement (the "License Agreement"), with The Board of Trustees of the Leland Stanford Junior University (Stanford), pursuant to which Stanford granted us a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

Pursuant to the License Agreement, the Company paid an upfront license fee of $50.0 thousand, and as additional consideration for the license, the Company agreed to issue to Stanford approximately 640,861 shares of our common stock. As of December 31, 2020, the Company recorded its obligations to issue Stanford shares of common stock at an estimated fair value of $2.8 million to additional paid in capital. The common shares are expected to be issued when Stanford provides the inventors' names for allocation of the shares. Stanford also had an option to buy up to 10% of newly issued shares in the future private financings at the price paid by other participating investors. During the year ended December 31, 2021, the Company entered into amendments to the License Agreement, pursuant to which it extended the time when the shares will be issued to May 7, 2021.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right as described below.

The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020.

In connection with the License Agreement, the Company reimbursed Stanford $0.2 million for previously incurred patent costs, which were recorded in general and administrative expenses for the year ended December 31, 2020 and, in addition, is obligated to reimburse future patent costs. During the year ended December 31, 2021, the reimbursements of patent costs to Stanford were minimal. During the year ended December 31, 2021, the Company has recognized a minimal amount in research and development expense in connection with the License Agreement

The Company is also obligated to pay annual maintenance fees as follows: $5.0 thousand in the first year, $10.0 thousand in each year 2 and 3, $25.0 thousand in each year 3 through 6, $50.0 thousand each subsequent year until first commercial sale and $200.0 thousand each subsequent year after the first commercial sale.

The Company is also obligated to make future development and regulatory milestone payments in total of up to $5.3 million, sales-based milestone payments of up to $7.5 million and royalties on future sales at percentage rates ranging in the low single digits. In addition, if the Company receives any sublicense income, it is required to share it with Stanford as a certain percentage defined for each milestone in the License Agreement. The Company will record the maintenance fees, when payable, and will record milestones when contingencies are resolved, and milestones are due. No milestones were achieved and recorded as of December 31, 2022 and 2021.

The term of the License Agreement expires on the later of (a) the expiration of the last patent or abandonment of the last patent application within the license patent rights or (b) the expiration of all royalty terms with respect to Licensed Products.

The Stanford License terminates on a product by product and country by country basis on the latest to occur of (i) expiration of the last valid claim of a licensed patent that covers the sale or manufacture of the applicable licensed product in such country, (ii) expiration of any period of regulatory exclusivity granted with respect to such licensed product in such country or (iii) ten years after the first commercial sale of such licensed product in a country Stanford also has a right to terminate the agreement if milestones plan is rejected by Stanford as specified in the License Agreement.

In January 2021, the Company entered into an option agreement (the “First Option Agreement”), with Stanford, pursuant to which Stanford granted the Company the right to obtain a license to specified patent rights relating to human prophylactic and therapeutic products. The Company may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights.

Subject to the Company’s exercise of the option under the First Option Agreement and its execution of an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology, the Company has agreed to issue to Stanford 132,137 shares of its common stock and pay a license execution fee of $10.0 thousand.

The term of the First Option Agreement expires 18 months after its effective date, subject to the Company’s right to extend such expiration date by up to an additional one year upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the License Agreement terminates. On June 23, 2022, the Company exercised its right to extend the term of the First

Option Agreement for an additional year. As of December 31, 2022, the Company had not exercised the option under the First Option Agreement and no fees have been paid for the First Option Agreement.

In April 2021, the Company entered into an option agreement (the "Second Option Agreement") with Stanford to negotiate the license for additional technologies from Stanford. Pursuant to the Second Option Agreement, the Company agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. On April 13, 2022, the Company entered into an amendment to the Second Option Agreement which extended the term for an additional year and the maintenance fee of $10.0 thousand for the extension was paid in the year ended December 31, 2022. As of December 31, 2022, the Company had not exercised the option under the Second Option Agreement.

LCGM Service Agreement

On August 30, 2021, the Company entered into a Master Manufacturing and Service Agreement with the Laboratory for Cell & Gene Medicine at Stanford ("LCGM MSA"). Pursuant to the LCGM MSA, LCGM will conduct clinical manufacturing, release testing, and product release for nula-cel in the Company's Phase 1/2 CEDAR clinical trial to treat SCD. During 2021, the Company entered into various SOWs under the LCGM MSA under which it received technology transfer and related services for HBB Beta-Globin Gene Variant for SCD, manufacturing engineer test runs, the exclusive use of a manufacturing suite at the LCGM facility, and Phase 1/2 CEDAR clinical development and manufacturing of the HBB Variant for SCD. During the years ended December 31, 2022 and 2021, the Company has recognized $6.1 and $2.7 million in research and development expense in connection with the LCGM MSA.

IDT License Agreement

On June 7, 2021, the Company entered into a License Agreement ("IDT License Agreement") with Integrated DNA Technologies, Inc. ("IDT"). Pursuant to the IDT License Agreement, IDT granted the Company and its affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic applications for SCD, XSCID and Gaucher disease (the Field) and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. The Company has also been granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

In consideration of the licenses and rights granted to the Company under the IDT License Agreement, the Company agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if the Company elects to expand the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, the Company has agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances. The acquisition of the license was accounted for as an asset acquisition and as the acquired technology did not have an alternative use, the total consideration of $3.0 million was recorded as research and development expense in the statement of operations and comprehensive loss for the year ended December 31, 2021.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. The Company and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, the Company may terminate the IDT License Agreement for any reason upon written notice.

During the years ended December 31, 2022 and 2021, the Company has recognized $0.0 and $3.0 million, respectively, in research and development expense in connection with the IDT License Agreement. There are no milestones probable as of December 31, 2022 and 2021; therefore, no milestone payments have been recognized in the years ended December 31, 2022 and 2021.

Master Development and Manufacturing Services Agreement (for cell therapy services)

In November 2022, we entered into a master development and manufacturing services agreement, with the WuXi Agreement, pursuant to which we may engage WuXi, at our discretion, to provide services under separate work orders for cell therapy services. To date, pursuant to the WuXi Agreement, we have entered into three work orders for cell therapy services. Following our decision to discontinue the development of nula-cel, we do not intend to enter into new work orders under the WuXi Agreement.

Bayside Lease

On December 16, 2021, the Company entered into a lease agreement with Bayside Area Development, LLC ("Bayside") for 85,165 square feet of office and laboratory space at 233 E Grand Avenue, South San Francisco (the "Bayside Lease Agreement"). Pursuant to the Bayside Lease Agreement, the Company is expected to commence the lease on or before September 15, 2023 with a total term of 120 months. Future minimum lease payments under the Bayside Lease Agreement total $81.0 million, which does not include lease payments related to the Company's one-time option to extend for an additional ten years.

As of December 31, 2022 and 2021, the Company posted a security deposit in the amount of $1.6 million in the form of a letter of credit in connection with the Bayside Lease Agreement, which is classified as restricted cash, non-current on the balance sheet. In addition, the lessor provided for a tenant improvement allowance of up to $14.9 million, which is expected to be fully utilized. As of December 31, 2022, the Company had recognized $12.2 million of tenant improvements, which was recorded as construction-in-progress and included within property and equipment, net on the Company's balance sheets.

As of December 31, 2022 and 2021, there was no right-of-use asset or lease liability recorded on the balance sheet for the Bayside Lease Agreement as the Company has not yet obtained possession of the space and the lease has not yet commenced.

7. Commitments and Contingencies

Research and Development Agreements

The Company enters into contracts in the normal course of business with CROs for clinical trials, with CMOS or other vendors for preclinical studies, supplies and other services and products for operating purposes. These contracts generally provide for termination on notice or may have a potential termination fee if a purchase order is cancelled within a specified time. As of December 31, 2022 and 2021, there were no amounts accrued related to termination and cancellation charges as the Company has not determined cancellation to be probable.

License Agreements

The Company entered into the license agreements (Note 6), pursuant to which the Company is required to pay certain cash milestones contingent upon the achievement of specific events. No such milestones were achieved or probable as of December 31, 2022 and 2021. The Company is required to pay royalties on sales of products developed under this agreement. All products are in development as of December 31, 2022 and 2021 and no such royalties were due.

Legal Contingencies

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of business. The Company records a liability for such matters when it is probable that future losses will be incurred and that such losses can be reasonably estimated. Significant judgment by the Company is required to determine both probability and the estimated amount. Management is currently not aware of any legal matters that could have a material adverse effect on the Company's financial position, results of operations or cash flows.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2022 and 2021, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

8. Operating Leases

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-02, *Leases* ("ASC 842"). Under ASC 842, the Company determines if an arrangement is a lease at inception. Lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected lease term. In determining the present value of lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date if the rate implicit in the lease is not readily determinable. The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. A lessee is also required to record right-of-use assets and lease liabilities for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less may be accounted for similar to existing guidance for operating leases today and are not recorded on the Company's balance sheet. The Company early adopted the new standard as of January 1, 2021 on a modified retrospective basis with no cumulative adjustment to accumulated deficit. The Company elected to take the practical expedient to not separate lease and non-lease components as part of the adoption. Lease agreements entered into after the adoption of Topic 842 that include lease and non-lease components are accounted for as a single lease component. Beginning on January 1, 2021, any of the Company's new operating leases, excluding those with terms less than 12 months, will be discounted and recorded as assets and liabilities on the Company's balance sheet.

As of December 31, 2022, the current and non-current portions of the total liability for operating leases was $4.0 million $1.7 million, respectively. As of December 31, 2022, the weighted average remaining lease term on the operating lease is 19 months. The weighted average incremental borrowing rate used to determine the operating lease liabilities included on the balance sheet was 8.5%.

Facility leases

In April 2020, the Company entered into a one-year lease agreement for its headquarter facility located in South San Francisco, California with a significant portion of the premises allocated to the research lab. Due to the COVID-19 pandemic, the use of the entire facility was temporarily designated to research, and as such, all associated costs were expensed as research and development. In addition to payment of base rent, the Company is also required to pay property taxes, insurance, and common area expenses. The Company records lease expense on a straight-line basis over the term of the lease. The original term of the lease was from May 11, 2020 to June 30, 2021 with an option to renew. In March 2021, the Company entered into an amendment to the lease agreement and extended the term of the lease to September 30, 2021. The lease expired without further renewal and was terminated on September 30, 2021.

On January 27, 2021, the Company entered into a new lease agreement for office and lab space in South San Francisco, California that included two office suites. The lease terms for the two office suites commenced during July and August 2021, respectively. The term of the lease is 44 months for the first office suite and 43 months for the

second office suite with an option to extend the term for an additional two years on the same terms and conditions. This option to extend the lease term was not determined to be reasonably certain and therefore has not been included in the Company's calculation of the associated operating lease liability under ASC 842. The corresponding right-of-use assets and lease liabilities related to the two office suites were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

On November 10, 2021, the Company entered a sublease agreement for office and lab space located at Brisbane, California. The sublease expires on December 6, 2023. The corresponding right-of-use assets and lease liabilities related to the sublease were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

As of December 31, 2022, the Company had operating lease right-of-use assets of $4.2 million and operating lease liabilities of $4.5 million related to the office suite leases recorded on its balance sheet.

Embedded leases

The Company evaluated its vendor contracts to identify embedded leases, if any, and determined that two agreements with contract manufacturing suppliers constituted a lease under ASC 842 as the Company has the right to substantially all of the economic benefits from the use of the asset and can direct the use of the asset.

On May 10, 2021 and August 30, 2021, the Company and LCGM entered into the LCGM MSA and SOW #3, respectively, for the exclusive use of a manufacturing suite at the LCGM facility. Pursuant to the terms of SOW #3, LCGM agreed to provide the Company with certain dedicated space for the clinical manufacturing, release testing, and product release in the Company's Phase 1 clinical trial to treat Sickle Cell Disease. The Company concluded that the agreement contains an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The agreement includes fixed lease payments of $5.6 million through April 30, 2023, the expiration date of SOW #3.

The Company and Explora BioLabs, Inc. ("Explora") entered into a License Service Agreement and Master Services Agreement (together, the "Explora Agreements") on November 17, 2021 and December 16, 2021, respectively. Pursuant to the terms of the Explora Agreements, Explora agreed to provide a certain dedicated space to perform in vitro or in vivo studies, obtain or house research animals, and provide scientific or technical consultation to the Company. The Company concluded that the agreement contains an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The Explora Agreements contain fixed lease payments of $0.7 million through November 2023.

As of December 31, 2022, the Company had operating lease right-of-use assets of $1.4 million and operating lease liabilities of $1.2 million related to the embedded leases recorded on its balance sheet related to the embedded leases.

Operating Lease Obligations

As of December 31, 2022, the future minimum lease payments for the Company's operating leases for each of the years ending December 31 were as follows (in thousands):

	Amount
2023	$ 4,331
2024	1,468
2025	375
Thereafter	—
Total undiscounted lease payments	6,174
Present value adjustment	(380)
Total net lease liabilities	$ 5,794

Lease expense was $6.7 and $1.9 million for the years ended December 31, 2022 and 2021, respectively.

Under the terms of the remaining lease agreements, the Company is also responsible for certain variable lease payments that are not included in the measurement of the lease liability. Variable lease payments for operating leases were $1.3 and $0.2 million for the years ended December 31, 2022 and 2021, respectively, including non-lease components such as common area maintenance fees, taxes, and insurance.

The following information represents supplemental disclosure for the statement of cash flows related to the operating leases (in thousands):

	December 31, 2022
Cash paid for amounts included in the measurement of lease liabilities Operating cash flows under operating leases	$ 6,172

9. Redeemable Convertible Preferred Stock

In June 2021, immediately prior to the completion of the Company's IPO (Note 1), all outstanding shares of redeemable convertible preferred stock were automatically converted into 30,761,676 shares of common stock. Upon conversion into common stock, the carrying value of the redeemable convertible preferred stock of $260.5 million was reclassified to equity.

Series A Redeemable Convertible Preferred Stock

In June 2020, the Company issued 10,000,000 shares of its Series A redeemable convertible preferred stock at a price of $1.00 per share for gross cash proceeds of $10.0 million and issued 5,019,949 shares of its Series A redeemable convertible preferred stock upon the conversion of the outstanding convertible note and accrued interest.

In connection with the initial issuance of the shares of its Series A redeemable convertible preferred stock, the Company had an obligation to sell and the holders had the obligation to purchase the additional 30,000,000 shares of Series A redeemable convertible preferred stock at $1.00 per share upon the achievement of certain milestones as determined by the Board and approved by at least one of the investors, or upon the waiver of such milestones by the holders of at least 75% of the outstanding shares of Series A redeemable convertible preferred stock, in two equal tranches of $15.0 million each. The Company determined that the obligation to sell additional shares is a freestanding financing instrument and a liability. The Company estimated the fair value of the liability to be $3.3 million and recorded it as a reduction to redeemable convertible preferred stock and as a derivative redeemable convertible preferred stock tranche liability in its balance sheet at the issuance date.

In December 2020, the requisite holders waived the second tranche milestone event and the Company issued 15,000,000 shares of its Series A redeemable convertible preferred stock for gross cash proceeds of $15.0 million. The redeemable convertible preferred stock tranche liability related to the second tranche shares was remeasured to fair value of $29.1 million and reclassified to redeemable convertible preferred shares upon the settlement.

In connection with the issuance of Series A redeemable convertible preferred stock, in the year ended December 31, 2020, the Company incurred issuance costs of $0.2 million. As of December 31, 2020, the redeemable convertible preferred stock tranche liability related to the third tranche shares was remeasured at fair value of $29.1 million and continued to be reported in current liabilities.

The Company settled the third tranche in February 2021 and issued 15,000,000 shares of its Series A redeemable convertible preferred stock for gross cash proceeds of $15.0 million. The Company recognized a total

of $54.8 million as other loss in the statements of operations and comprehensive loss related to the changes in the fair value of the redeemable convertible preferred stock tranche liabilities during the year ended December 31, 2020.

Prior to the closing of the third tranche of the Series A preferred stock financing in February 2021, the remaining tranche liability was remeasured at a fair value of $39.4 million. The Company recognized a loss of $10.3 million in the statements of operations and comprehensive loss related to the change in the fair value of the redeemable convertible preferred stock tranche liability during the year ended December 31, 2021.

In connection with the closing of the third tranche of Series A redeemable convertible preferred stock, the Company incurred issuance costs of $4.0 thousand during the year ended December 31, 2021.

Series B Redeemable Convertible Preferred Stock

In March 2021, the Company issued 29,792,487 shares of the Series B redeemable convertible preferred stock at $5.06 per share for gross cash proceeds of $150.7 million. The Company incurred issuance costs of $0.2 million.

10. Common Stock

As of December 31, 2022 and 2021, the Company was authorized to issue 300,000,000 shares of its common stock with $0.00001 par value per share. Each share of the Company's common stock is entitled to one vote. In connection with the IPO in June 2021, all outstanding shares of redeemable convertible preferred stock were converted into 30,761,676 shares of common stock. The IPO closed on June 29, 2021, pursuant to which the Company issued and sold 14,000,000 shares of its common stock at a public offering price of $17.00 per share.

On June 29, 2021, the underwriters also exercised their option to purchase an additional 2,100,000 shares of common stock at the IPO price, less the underwriting discounts and commissions. The closing of the offering of the additional shares occurred on July 2, 2021. The Company issued and sold 2,100,000 shares of its common stock at a public offering price of $17.00 per share.

Shares Reserved for Future Issuance

As of December 31, 2022 and 2021, the Company reserved common stock for future issuances as follows:

	December 31, 2022	December 31, 2021
Outstanding stock option awards	7,755,303	5,056,743
Shares available for future stock option grants	5,382,907	4,454,004
ESPP shares available for future grants	754,951	524,106
Total shares reserved for future issuance	13,893,161	10,034,853

Founders' and Investor's Restricted Common Stock

In March 2020, the Board approved and in April 2020, the Company issued 6,081,413 shares of its common stock to its founders and 2,467,104 shares of its common stock to its investor at the purchase price of $0.00002 per share. As of December 31, 2020, the investor's shares were fully vested and a portion of the shares issued were subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The shares of the Company's common stock issued to its founders for their services as an employee, advisor, or consultant vest monthly over four years with one year cliff from the vesting commencement date. The vesting commencement date was the date of the initial closing of the Series A preferred stock financing or June 24, 2020. Pursuant to the restricted stock purchase agreements with each of the founders, the vesting of the founders' common stock shares could be accelerated upon the occurrence of certain events, including signing of the term sheet for the license with Stanford, a change in control, or if the founder's service is terminated by the Company without cause. The Company signed the term sheet with Stanford in June 2020, and as a result, an aggregate of 912,212 shares of founders' common stock vested pursuant to the acceleration terms.

If a founder terminates the service relationship with the Company during the vesting period, the Company may repurchase any unvested restricted common stock at the price per share equal to the lower of (i) the original purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right, as described below. The repurchase right lapses in 180 days after the termination of the founder's service or employment. During the vesting term, holders of founders' common stock awards are deemed to be common stockholders and have the right to receive dividends and voting rights.

The founders' shares of common stock are also subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The Company accounts for shares issued to founders as equity compensation awards and the estimated fair value at the grant date was minimal. 1,938,430 and 3,230,746 shares of founders' common stock awards were unvested and expected to vest in 1.5 years and 2.5 years as of December 31, 2022 and 2021, respectively.

Stanford Adjustment Repurchase Right

Upon the issuance of shares of common stock to Stanford pursuant to the License Agreement, as discussed in Note 5, the Company has a right to repurchase from each founder and an investor a number of shares of common stock equal to the number of shares issued to Stanford multiplied the applicable number of shares issued to the founder or investor, as applicable, divided by 7,273,848 shares (a fully diluted number of shares of the Company at the end of March 2020, after founders and the investor's shares were approved by the board of directors). The Stanford Adjustment Repurchase Right may be exercised by the Company within six months following the date of the issuance of the shares of common stock to Stanford. The repurchase price per share is equal to the lower of (i) the purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, etc., or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right. As of December 31, 2022, the Company has not exercised the right to purchase the remaining 16,016 shares.

The Company accounts for the founders and investor's shares of restricted common stock as equity share-based awards.

11. Equity Incentive Plans

2020 Stock Option and Grant Plan

The Company grants share-based awards under the 2020 Stock Option Plan, as amended (the "2020 Plan"). The Company may grant under the 2020 Plan incentive stock options, nonqualified stock options, restricted stock

awards, restricted stock units and other share-based awards to the Company's officers, employees, directors and consultants. Options under the 2020 Plan may be granted for periods of up to 10 years and at prices no less than 100.0% of the estimated fair value of the shares on the date of grant as determined by the Board, provided, however, that the exercise price of an incentive stock option granted to a 10.0% stockholder shall not be less than 110.0% of the estimated fair value of the shares on the date of grant and the option is not exercisable after the expiration of five years from the date of grant. Options generally vest monthly over four years with or without one year cliff vesting. Per the 2020 Plan, granted options maybe early exercised prior to vesting and the Company will issue shares of restricted stock upon the early exercise with vesting terms consistent with the original grant. Upon completion of the Company's IPO, the remaining shares available for issuance under the 2020 Plan were retired.

2021 Stock Option and Grant Plan

In June 2021, the Company's Board of Directors approved the 2021 Stock Option and Incentive Plan (the "2021 Plan") that became effective immediately prior to the date when the Company's prospectus was declared effective by the SEC on June 24, 2021. The Company initially reserved 5,636,000 shares of common stock for issuance of awards under the 2021 Plan. The 2021 Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning on January 1, 2022, by 5% of the outstanding number of shares of the Company's common stock on the immediately preceding December 31, or such lesser number of shares as determined by the Company's compensation committee. On January 1, 2022, the number of shares of common stock available under the 2021 Plan increased by 2,900,541 shares pursuant to this evergreen provision of the 2021 Plan. The option exercise price of each option will be determined by the Company's compensation committee but generally may not be less than 100% of the fair market value of the Company's common stock on the date of grant. The term of each option will be fixed by the Company's compensation committee and may not exceed ten years from the date of grant. The grant date fair value of all awards made under the 2021 Plan and all other cash compensation paid by the Company to any non-employee director for services as a non-employee director in any calendar year may not exceed $1.0 million for the first year of service and $750.0 thousand for each year of service thereafter.

As of December 31, 2022, there were 5,382,907 shares available for future issuance under the 2021 Plan.

Restricted Stock Awards

During the year ended December 31, 2020, the Company issued 832,983 shares as restricted stock awards under the 2020 Plan. The purchase price of the restricted common stock awards was fair value as determined by the Board at the issuance date. The shares vest monthly over four years with the one-year cliff vesting from the grant date. Upon termination of employment, the Company has the right to repurchase any unvested restricted shares. The repurchase price for unvested shares of common stock will be the lower of (i) the fair market value on the date of repurchase or (ii) their original purchase price. There were no shares issued during the years ended December 31, 2022 and 2021.

The Company accounted for restricted stock awards as early exercised options and recognized a liability in other liabilities when cash was received for the purchase of shares of restricted stock awards. As shares of restricted stock awards vest, the Company reclassified the liability to common stock and additional paid in capital. As of December 31, 2022 and 2021, the Company recorded a minimal liability for restricted stock awards included in accrued expenses and other current liabilities.

There were 5,140 shares of restricted stock award shares canceled and repurchased as of December 31, 2022. No restricted stock award shares were cancelled or repurchased as of December 31, 2021. There were 553,443 and 345,966 shares of restricted stock vested as of December 31, 2022 and 2021, respectively.

Employee Stock Purchase Plan

In June 2021, the Company's board of directors and stockholders approved the 2021 Employee Stock Purchase Plan (the "2021 ESPP") which became effective upon the IPO. The 2021 ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended, and is administered by the Company's board of directors and the Compensation Committee of the board of directors. Under the 2021 ESPP, 564,000 shares of the Company's common stock have been initially reserved for employee purchases of the Company's common stock. The 2021 ESPP allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions of up to 15% of their eligible compensation. At the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of the Company's common stock at the beginning of the offering period or at the end of each applicable purchase period. The first purchase period commenced upon the completion of the Company's IPO and ended on November 30, 2021 and the subsequent offering periods commenced on December 1, 2021, June 1, 2022, and December 1, 2022. The Company recorded $0.1 million in accrued liabilities as of December 31, 2022.

Effective January 1, 2022, the number of shares of common stock available under the 2021 ESPP increased by 564,000 shares pursuant to the evergreen provision of the 2021 ESPP.

	Year Ended December 31,	
	2022	2021
Expected volatility	73.00% - 75.00%	72.00% - 74.00%
Expected dividend yield	0%	0%
Expected term (in years)	0.5	0.44 - 0.5
Risk-free interest rate	0.10% - 4.65%	0.10% - 1.00%

Incentive Stock Options and Nonqualified Stock Options

Stock options issued under the 2020 Plan and 2021 Plan, generally, vest over a four-year period and expire ten years from the date of grant. Certain options provide for accelerated vesting if there is a change in control, as defined in the individual award agreements.

The Company used the Black-Scholes option pricing model to estimate stock-based compensation expense for stock option awards granted during the periods presented, with the following assumptions.

	Year Ended December 31,	
	2022	2021
Expected volatility	74.00% - 75.00%	72.00% - 77.74%
Expected dividend yield	0%	0%
Expected term (in years)	5.97 - 6.01	5.48 - 6.04
Risk-free interest rate	1.91% - 4.23%	0.56% - 1.34%

A summary of option activity under the 2020 Plan and the 2021 Plan during the year ended December 31, 2022 is as follows:

	Number of Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2021	5,056,743	$ 8.77	9.2	$ 18,503
Options granted—2021 Plan	3,292,702	$ 7.91		
Options exercised	(67,196)	$ 0.30		
Options cancelled	(526,946)	$ 8.99		
Outstanding as of December 31, 2022	7,755,303	$ 8.47	8.7	$ 794
Exercisable	2,330,389	$ 8.74	8.3	$ 388
Vested and expected to vest as of December 31, 2022	7,755,303	$ 8.47	8.7	$ 794

Aggregate intrinsic value represents the difference between the fair value of the underlying common stock and the exercise price as of December 31, 2022. The weighted-average grant date fair value of options granted during the year ended December 31, 2022 was $5.21 per share. The intrinsic value of the stock options exercised was $0.2 and $5.0 million for the years ended December 31, 2022 and 2021, respectively.

Early Exercise of Stock Options

The terms of the 2020 Plan permit the exercise of options granted prior to vesting, subject to required approvals. The unvested shares are subject to the repurchase right upon termination of employment at the original purchase price. The repurchase right lapses in 180 days after the termination of the employee's employment. Shares purchased by employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest according to their respective vesting schedules. Cash received for early exercised stock options is recorded as other liabilities on the balance sheet and is reclassified to common stock and additional paid-in capital as such shares vest. During the years ended December 31, 2022 and 2021, the Company repurchased 189,414 and 138,596 shares that were previously early exercised.

At December 31, 2022 and 2021, 554,695 and 1,195,631 shares, respectively, remained subject to the right of repurchase as a result of the early exercised stock options. The remaining liability related to early exercised shares as of December 31, 2022 and 2021 was $0.1 and $0.3 million, respectively, and was recorded in accrued expenses and other current liabilities, respectively, in the balance sheets.

Stock-Based Compensation Expense

The following table presents the components of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Year Ended December 31,	
	2022	2021
Restricted stock awards and founders' common stock awards	$ 11	$ 9
ESPP	391	215
Stock options	13,132	7,647
Total stock-based compensation expense	$13,534	$7,871

The above stock-based compensation expense also includes the expenses of $2.2 and $0.3 million related to stock options issued to non-employees during the years ended December 31, 2022 and 2021, respectively.

The following table presents the classification of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Year Ended December 31,	
	2022	2021
Research and development expenses	$ 5,317	$2,685
General and administrative expenses	8,217	5,186
Total stock-based compensation expense	$13,534	$7,871

As of the years ended December 31, 2022 and 2021, there was $31.0 and $30.5 million, respectively, of unrecognized stock-based compensation expense related to the employee and non-employee awards, which is expected to be recognized over a weighted-average period of 2.6 years and 3.3 years, respectively.

12. Net Loss Per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders, which excludes shares which are legally outstanding, but subject to repurchase by the Company (in thousands, except share and per share amounts):

	Year Ended December 31,	
	2022	2021
Numerator:		
Net loss	$ (101,052)	$ (70,760)
Denominator:		
Weighted-average common shares outstanding	58,111,437	35,121,114
Less: weighted-average unvested restricted shares and shares subject to repurchase	(3,237,762)	(6,201,859)
Weighted-average shares used to compute basic and diluted net loss per share attributable to common stockholders	54,873,675	28,919,255
Net loss per share attributable to common stockholders—basic and diluted:	$ (1.84)	$ (2.45)

Anti-dilutive Outstanding Shares or Equivalents

The following outstanding options, unvested shares, and ESPP shares were excluded (as common stock equivalents) from the computation of diluted net loss per common share for the periods presented as their effect would have been antidilutive (in thousands):

	Year Ended December 31,	
	2022	2021
Options to purchase common stock	7,755,303	5,056,743
Common stock subject to vesting or repurchase	2,767,526	4,774,798
Employee Stock Purchase Plan shares	168,080	99,252
Total	10,690,909	9,930,793

13. Income Taxes

No provision for income taxes was recorded for the years ended December 31, 2022 and 2021. The Company has incurred net operating losses only in the United States since its inception. The Company has not reflected any benefit of such net operating loss carryforwards in the financial statements.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate was as follows:

	Year Ended December 31,	
	2022	2021
Federal statutory income tax rate ate	21.00%	21.00%
State taxes	1.10	1.94
Others	(0.69)	(0.26)
Research and development credits	1.11	1.01
Cancellation of debt income	—	—
Tranche liability	—	(3.06)
Interest expense	—	—
Stock-based compensation	(0.97)	(0.96)
Change in valuation allowance	(21.55)	(19.67)
Provision for taxes	0.00%	0.00%

Net deferred tax assets and liabilities consisted of the following (in thousands):

	Year Ended December 31,	
	2022	2021
Deferred tax assets:		
Net operating losses—non-current	$ 15,940	$ 12,006
Capitalized R&D	13,815	—
General business credit—non-current	5,699	2,682
Operating lease right-of-use assets	1,220	2,368
Stock based compensation	1,703	784
Accruals and reserves	735	525
Fixed assets	170	396
Other	3	2
Gross deferred tax assets	39,285	18,763
Valuation allowance	(38,110)	(16,332)
Net deferred tax assets	1,175	2,431
Fixed asset basis	—	—
Operating lease liabilities	(1,175)	(2,431)
Other	—	—
Gross deferred tax liabilities	(1,175)	(2,431)
Valuation allowance	$ —	$ —

Net operating losses and tax credit carryforwards were as follows as of December 31, 2022 (dollars in thousands):

	Year Ended December 31, 2022	
	Amount	Expiration Years
Net operating losses, federal (starting from January 1, 2018)	$ 75,730	Do Not Expire
Net operating losses, state	3,195	2039 - 2042
Tax credits, federal	5,309	2041 - 2042
Tax credits, state	592	Do Not Expire

Utilization of the net operating loss carryforwards and research credit carryforwards may be subject to an annual limitation due to the ownership percentage change limitations provided by the Internal Revenue Code, as amended, ("IRC"), and similar state provisions. Annual limitations may result in the expiration of the net operating losses and tax credit carryforwards before they are utilized. The Company did not perform an IRC Section 382 analysis and any previous ownership changes may result in a limitation that will reduce the total amount of net operating loss and tax credit carryforwards disclosed that can be utilized. Subsequent ownership changes may affect the limitation in future years.

During the years ended December 31, 2022 and 2021, the Company recorded a full valuation allowance on federal and state deferred balances since management does not forecast the Company to be in a profitable position in the near future. Changes in the valuation allowance for deferred tax assets during the years ended December 31, 2022 and 2021 related primarily to the increases in net operating loss carryforwards and research and development tax credit carryforwards and were as follows (in thousands):

	Year Ended December 31,	
	2022	2021
Valuation allowance at the beginning of the year	$ 16,332	$ 2,414
Increases recorded to income tax provision	21,778	13,918
Valuation allowance at the end of the year	$ 38,110	$ 16,332

The Company's U.S. federal and state income tax returns are generally subject to tax examinations for the tax years from inception through December 31, 2021. There are currently no pending income tax examinations. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service and state tax authorities to the extent utilized in a future period.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,	
	2022	2021
Balance at beginning of year	$ 1,407	$ —
Additions based on tax positions related to current year	1,862	1,258
Increase (reduction) for prior period positions	(568)	149
Unrecognized tax benefit-December 31	$ 2,701	$ 1,407

The entire amount of the unrecognized tax benefits would not impact the Company's effective tax rate if recognized. The Company's policy is to record interest and penalties related to income taxes as part of its income tax provision. The Company has elected to include interest and penalties as a component of tax expense. During the years ended December 31, 2022 and 2021, the Company did not recognize accrued interest and penalties related to unrecognized tax benefits. The Company does not anticipate that the amount of existing unrecognized tax benefits will significantly increase or decrease during the next 12 months.

14. Subsequent Events

In February 2023, we announced a workforce reduction plan (the "Plan") intended to realign our investments to accelerate our growth strategy and further optimize our operations and cost structure. The Plan is expected to result in reductions to our headcount of approximately 50% during 2023. In connection with the Plan, we currently estimate that we will incur charges consisting primarily of cash termination benefits and other employee-related costs. We are continuing to evaluate the amount of these charges and expect that the majority of these charges will be recognized during the second quarter of 2023.

Graphite Bio, Inc.
Condensed Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	September 30, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 182,988	$ 47,730
Investments in marketable securities, current	50,998	220,499
Assets held for sale	20	—
Prepaid expenses and other current assets	4,777	7,136
Total current assets	238,783	275,365
Restricted cash	1,716	1,716
Investments in marketable securities, non-current	—	15,322
Property and equipment, net	12,534	22,630
Operating lease right-of-use assets	13,195	5,580
Other assets	—	1,289
Total assets	$ 266,228	$ 321,902
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,753	$ 2,608
Accrued compensation	1,899	3,799
Accrued research costs	30	720
Accrued expenses and other current liabilities	3,416	1,871
Operating lease liabilities, current	3,439	4,045
Total current liabilities	12,537	13,043
Operating lease liabilities, non-current	49,672	1,749
Other long- term liabilities	—	10,819
Total liabilities	62,209	25,611
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.00001 par value, 10,000,000 shares authorized as of September 30, 2023 and December 31, 2022; and no shares issued and outstanding as of September 30, 2023 and December 31, 2022	—	—
Common stock, $0.00001 par value, 300,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 57,971,910 and 58,221,760 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	1	1
Additional paid-in capital	548,249	539,741
Accumulated other comprehensive loss	(95)	(1,048)
Accumulated deficit	(344,136)	(242,403)
Total stockholders' equity	204,019	296,291
Total liabilities and stockholders' equity	$ 266,228	$ 321,902

The accompanying notes are an integral part of these unaudited condensed financial statements

Graphite Bio, Inc.
Condensed Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	$ 2,384	$ 18,302	$ 32,136	$ 54,325
General and administrative	11,294	7,852	26,372	24,563
Restructuring and impairment costs	11,349	—	51,128	—
Total operating expenses	25,027	26,154	109,636	78,888
Loss from operations	(25,027)	(26,154)	(109,636)	(78,888)
Other income (expense), net:				
Interest income, net	2,955	1,472	8,387	2,435
Loss on disposal of assets	—	—	(71)	—
Other income (expense), net:	(413)	—	(413)	—
Total other income, net	2,542	1,472	7,903	2,435
Net loss	$ (22,485)	$ (24,682)	$ (101,733)	$ (76,453)
Unrealized gain (loss) on investments in marketable securities	176	(563)	953	(1,596)
Comprehensive loss	$ (22,309)	$ (25,245)	$ (100,780)	$ (78,049)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.39)	$ (0.45)	$ (1.79)	$ (1.40)
Weighted-average shares used in computing net loss per share—basic and diluted	57,257,241	55,206,139	56,748,995	54,591,593

The accompanying notes are an integral part of these unaudited condensed financial statements

Graphite Bio, Inc.
Condensed Statements of Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2022	58,221,760	$ 1	$539,741	$ (1,048)	$ (242,403)	$ 296,291
Vesting of early exercised shares	—	—	25	—	—	25
Repurchase of unvested early exercised shares	(26,942)	—	—	—	—	—
Stock-based compensation expense	—	—	3,263	—	—	3,263
Unrealized gain on investments in marketable securities	—	—	—	579	—	579
Net loss	—	—	—	—	(23,934)	(23,934)
Balance at March 31, 2023	58,194,818	$ 1	$543,029	$ (469)	$ (266,337)	$ 276,224
Common stock issued upon exercise of options	55,047	—	18	—	—	18
Common stock issued under ESPP	65,222	—	157	—	—	157
Vesting of early exercised shares	—	—	18	—	—	18
Repurchase of founders' shares	(152,694)	—	—	—	—	—
Repurchase of unvested early exercised shares	(173,120)	—	—	—	—	—
Stock-based compensation expense	—	—	2,845	—	—	2,845
Unrealized gain on investments in marketable securities	—	—	—	198	—	198
Net loss	—	—	—	—	(55,314)	(55,314)
Balance at June 30, 2023	57,989,273	$ 1	$546,067	$ (271)	$ (321,651)	$ 224,146
Common stock issued upon exercise of options	10,367	—	16	—	—	16
Vesting of early exercised shares	—	—	5	—	—	5
Repurchase of unvested early exercised shares	(27,730)	—	—	—	—	—
Stock-based compensation expense	—	—	2,161	—	—	2,161
Unrealized gain on investments in marketable securities	—	—	—	176	—	176
Net loss	—	—	—	—	(22,485)	(22,485)
Balance at September 30, 2023	57,971,910	$ 1	$548,249	$ (95)	$ (344,136)	$ 204,019
Balance at December 31, 2021	58,010,823	1	525,400	—	(141,351)	384,050
Stock-based compensation expense	—	—	3,342	—	—	3,342
Vesting of early exercised shares	—	—	51	—	—	51
Unrealized loss on investments in marketable securities	—	—	—	(309)	—	(309)
Net loss	—	—	—	—	(25,835)	(25,835)
Balance at March 31, 2022	58,010,823	$ 1	$528,793	$ (309)	$ (167,186)	$ 361,299

The accompanying notes are an integral part of these unaudited condensed financial statements.

Graphite Bio, Inc.
Condensed Statements of Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Common stock issued upon exercise of options	43,945	$ —	$ 13	$ —	$ —	$ 13
Common stock issued under ESPP	207,137	—	414	—	—	414
Vesting of early exercised shares	—	—	30	—	—	30
Repurchase of unvested early exercised stock options	(50,713)	—	—	—	—	
Stock-based compensation expense	—	—	3,360	—	—	3,360
Unrealized loss on investments in marketable securities	—	—	—	(724)	—	(724)
Net loss	—	—	—	—	(25,936)	(25,936)
Balance at June 30, 2022	58,211,192	$ 1	$532,610	$ (1,033)	$ (193,122)	$ 338,456
Common stock issued upon exercise of options	17,000	—	5	—	—	5
Vesting of early exercised shares	—	—	27	—	—	27
Repurchase of unvested early exercised stock options	(78,875)	—	—	—	—	—
Stock-based compensation expense	—	—	3,210	—	—	3,210
Unrealized loss on investments in marketable securities	—	—	—	(563)	—	(563)
Net loss	—	—	—	—	(24,682)	(24,682)
Balance at September 30, 2022	58,149,317	$ 1	$535,852	$ (1,596)	$ (217,804)	$ 316,453

The accompanying notes are an integral part of these unaudited condensed financial statements.

Graphite Bio, Inc.
Condensed Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2023	2022
Cash flows from operating activities:		
Net loss	$(101,733)	$ (76,453)
Adjustments to reconcile net loss to net cash used in operating activities:		
Net amortization of premiums and discounts on investments in marketable securities	(3,422)	(479)
Depreciation and amortization	2,265	1,670
Non-cash lease expense	3,860	4,454
Stock-based compensation expense	8,269	9,912
Loss on sale/ disposal of assets	71	—
Impairment of assets	43,276	—
Changes in assets and liabilities:		
Assets held for sale	(20)	—
Prepaid expenses and other current assets and other assets	4,884	(2,437)
Accounts payable	1,145	1,275
Accrued compensation	(1,900)	657
Accrued research costs	(690)	(280)
Accrued expenses and other current liabilities and other liabilities	2,479	399
Operating lease liabilities	(2,614)	(4,269)
Net cash used in operating activities	(44,130)	(65,551)
Cash flows from investing activities:		
Purchases of property and equipment	(10,806)	(5,573)
Proceeds from sales of property and equipment	1,225	—
Purchases of investments in marketable securities	(28,130)	(339,814)
Proceeds from maturities of marketable securities	216,975	90,000
Net cash provided by (used in) investing activities	179,264	(255,387)
Cash flows from financing activities:		
Proceeds from issuance of common stock upon exercise of vested stock options	34	18
Proceeds from employee stock purchase plan	157	414
Repurchase of unvested early exercised shares and founders' shares	(67)	(79)
Net cash provided by financing activities	124	353
Net increase (decrease) in cash, cash equivalents and restricted cash	135,258	(320,585)
Cash, cash equivalents and restricted cash, at beginning of period	49,446	378,692
Cash, cash equivalents and restricted cash, at end of period	$ 184,704	$ 58,107
Reconciliation of cash, cash equivalents and restricted cash to statement of financial position:		
Cash and cash equivalents	182,988	56,391
Restricted cash	1,716	1,716
Cash, cash equivalents and restricted cash in statement of financial position	$ 184,704	$ 58,107
Supplemental disclosures of non-cash investing and financing information:		
Property and equipment purchases in accounts payable and accrued expenses	$ —	$ (319)
Lessor funded lease incentive additions included in property and equipment	$ 7,193	$ 2,616
Proceeds from sale of property and equipment in accounts receivable	$ 449	$ —
Additions to ROU assets from new operating lease liabilities	$ 31,974	$ —
Vesting of early exercised stock options	$ 48	$ 108

The accompanying notes are an integral part of these unaudited condensed financial statements.

Graphite Bio, Inc.
Notes to Condensed Financial Statements
(unaudited)

1. Description of Business, Organization and Liquidity

Organization and Business

Graphite Bio, Inc. (the "Company") has historically been a clinical-stage, next-generation gene editing company. In January 2023, the Company announced a voluntary pause of its Phase 1/2 CEDAR study of nulabeglogene autogedtemcel ("nula-cel"), the Company's lead product candidate for sickle cell disease ("SCD"), due to a serious adverse event in the first patient dosed, which the Company concluded is likely related to study treatment. Nula-cel was designed to provide a highly differentiated approach with the potential to directly correct the mutation that causes SCD and restore normal adult hemoglobin expression.

The Company was incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc., and was reincorporated in the State of Delaware in October 2019. In February 2020, the Company changed its name to Integral Medicines, Inc., and again in August 2020, changed the name to Graphite Bio, Inc. Research and development of the Company's initial technology ceased at the end of 2018, and the Company did not have any significant operations or any research and development activities in 2019. In March 2020, the Company identified new gene editing technology which the Company sought to further develop, and the Company licensed the related intellectual property rights from The Board of Trustees of the Leland Stanford Junior University ("Stanford") in December 2020 (Note 6).

In February 2023, the Company announced its decision to discontinue the development of nula-cel and initiate a process to explore strategic alternatives (the "Restructuring Plan"). As a result of this decision, the Company conducted a corporate restructuring that resulted in an approximately 50% reduction in force in February 2023 and additional reductions in July and August 2023 that resulted in a total reduction in force of 78.1%. In August 2023, the Company subleased some of its facilities to recover a portion of the total costs. Together, these restructuring actions are intended to reduce the Company's operational cash burn in an effort to maximize its strategic optionality.

The Company had previously disclosed its intention to continue research activities associated with its pre-clinical non-genotoxic conditioning program, with the goal of advancing toward one or more potential development candidates. In August, the Company entered into an asset purchase agreement pursuant to which the Company transferred to a third party its pre-clinical non-genotoxic conditioning program, including its technology and intellectual property. Also in August 2023, the Company entered into a license and option agreement (the "LOA"), pursuant to which it granted another third party an option to acquire certain of the Company's technology and intellectual property related to its nula-cel program and related pre-clinical platform assets. On September 12, 2023, the Company and such counterparty entered into an amendment to the LOA under which the Company agreed to assign certain contracts to such counterparty prior to exercise of the option. The Company continues to explore strategic alternatives.

From its inception in 2017, the Company's primary activities have been to perform research and development, undertake preclinical studies and enable manufacturing activities in support of its product development efforts, organize and staff the Company, establish its intellectual property portfolio, and raise capital to support and expand such activities.

Liquidity Matters

The Company has incurred significant operating losses since inception and has primarily relied on private equity and convertible debt financings to fund its operations. As of September 30, 2023, the Company had an accumulated deficit of $344.1 million. The Company expects to continue to incur substantial losses. The

Company may never achieve profitability, and unless and until then, the Company will need to continue to raise additional capital. Management expects that the existing cash, cash equivalents, and marketable securities of $234.0 million as of September 30, 2023 will be sufficient to fund the Company's current operating plan for at least the next 12 months from the date of issuance of these unaudited condensed financial statements.

On July 21, 2022, the Company filed a shelf registration statement on Form S-3 (the "2022 Shelf") with the SEC in relation to the registration of up to an aggregate offering price of $300.0 million of common stock, preferred stock, debt securities, warrants and units or any combination thereof. The Company also simultaneously entered into a Controlled Equity Offering℠ Sales Agreement with Cantor Fitzgerald & Co. (the "Sales Agent"), to provide for the offering, issuance and sale by the Company of up to an aggregate of $75.0 million of its common stock from time to time in "at-the-market" offerings under the 2022 Shelf and subject to the limitations thereof (the "Sales Agreement"). The Company will pay to the Sales Agent cash commissions of up to 3.0 percent of the gross proceeds of sales of common stock under the Sales Agreement. The Company has not issued any shares or received any proceeds from any offerings under the 2022 Shelf through November 13, 2023.

2. Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Unaudited Interim Condensed Financial Statements

The interim condensed balance sheet as of September 30, 2023 and the condensed statements of operations and comprehensive loss and stockholders' equity for the three and nine months ended September 30, 2023 and 2022 and the condensed statements of cash flows for the nine months ended September 30, 2023 and 2022 are unaudited. The unaudited interim condensed financial statements have been prepared on the same basis as the annual financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for the fair statement of the Company's financial position as of September 30, 2023 and its results of operations for the three and nine months ended September 30, 2023 and cash flows for the nine months ended September 30, 2023 and 2022. The financial data and the other financial information disclosed in these notes to the financial statements related to the three and nine month periods are also unaudited. The results of operations for the three and nine months ended September 30, 2023 are not necessarily indicative of the results to be expected for the year ending December 31, 2023 or for any other future annual or interim period. The condensed balance sheet as of December 31, 2022 included herein was derived from the audited financial statements as of that date. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted from these interim financial statements. These condensed financial statements should be read in conjunction with the Company's audited financial statements and the related notes thereto for the year ended December 31, 2022, which are included in the Company's Annual Report on Form 10-K filed with the SEC.

Significant Accounting Policies

The significant accounting policies used in preparation of these condensed financial statements for the three and nine months ended September 30, 2023 are consistent with those discussed in Note 2 to the condensed financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Use of Estimates

The preparation of condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of

contingent assets and liabilities at the date of the condensed financial statements, and the reported amounts of expenses during the reporting period. On an ongoing basis, the Company evaluates estimates and assumptions, including but not limited to those related to the fair value of the marketable securities, stock-based compensation expense, accruals for research and development costs, lease assets and liabilities, the valuation of deferred tax assets, valuation of uncertain income tax positions, and impairment of long-lived assets. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Principles of Consolidation

The Company assesses entities for consolidation based on the specific facts and circumstances surrounding that entity. The Company first considers whether an entity is considered a variable interest entity ("VIE") and therefore whether to apply the consolidation guidance under the VIE model. Entities that do not qualify as VIEs are assessed for consolidation as voting interest entities ("VOE") under the voting interest model.

An entity is considered to be a VIE if any of the following conditions exist: (i) the equity investment at risk is not sufficient to finance the activities of the entity without additional subordinated financial support, (ii) as a group, the holders of the equity investment at risk lack the power to direct the activities that most significantly impact the entity's economic performance or the obligation to absorb the expected losses or right to receive the expected residual returns, and (iii) the voting rights of some holders of the equity investment at risk are disproportionate to their obligation to absorb losses or right to receive returns, and substantially all of the activities are conducted on behalf of the holder of equity investment at risk with disproportionately few voting rights.

The Company consolidates all VIEs in which it is the primary beneficiary. An entity is determined to be the primary beneficiary if it holds a controlling financial interest in a VIE. The consolidation guidance requires an analysis to determine (i) whether an entity in which the Company holds a variable interest is a VIE and (ii) whether the Company's involvement, through holding interest directly or indirectly in the entity or contractually through other variable interests, would give it a controlling financial interest. Performance of that analysis requires judgment.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with a maturity of three months or less at the date of purchase to be cash equivalents. As of September 30, 2023 and December 31, 2022, cash and cash equivalents consisted of cash, money market funds, and commercial paper.

Restricted Cash

Restricted cash of $1.7 million as of September 30, 2023 and December 31, 2022 represented security deposits in the form of letters of credit issued in connection with the lease of 233 E. Grand Ave, which was to be the company's headquarters. A lease amendment was executed in October 2023, whereby the Company will have no further rent obligations to the landlord following the effective date, and the landlord will return the Company's letter of credit within 60 days following the amendment's effective date (Note 14). The letter of credit will be returned to the Company per the lease amendment.

Marketable Securities

The Company's marketable securities are accounted for as available-for-sale and recorded at fair value with the related unrealized gains and losses included in accumulated other comprehensive gain (loss).

The Company reviews its investment portfolio to identify and evaluate investments that have an indication of possible other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

Operating Leases

The Company accounts for its operating leases by recording right-of-use assets and lease liabilities on the Company's condensed balance sheets in accordance with Accounting Standards Codification ("ASC") 842, "Leases" ("ASC 842"). Right-of-use assets represent the Company's right to use an underlying asset over the lease term and include any lease payments made prior to the lease commencement date and are reduced by lease incentives. Lease liabilities represent the present value of the total lease payments over the lease term, calculated using the Company's incremental borrowing rate. The incremental borrowing rate is determined by using the rate of interest that the Company would pay to borrow on a collateralized basis an amount equal to the lease payments for a similar term and in a similar economic environment. The Company recognizes options to extend a lease when it is reasonably certain that it will exercise such extension. The Company does not recognize options to terminate a lease when it is reasonably certain that it will not exercise such early termination options. Lease expense is recognized on a straight-line basis over the expected lease term.

Recently Issued and Adopted Accounting Pronouncements

The Company is a smaller reporting company and an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay the adoption of new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Thus, the Company has elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) the Company is no longer an emerging growth company or (ii) the Company affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. The Company may early adopt certain accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is permitted.

3. Fair Value of Financial Assets

Assets and liabilities recorded at fair value on a recurring basis in the condensed balance sheets, as well as assets and liabilities measured at fair value on a non-recurring basis or disclosed at fair value, are categorized based upon the level of judgment associated with inputs used to measure their fair values. The accounting guidance for fair value provides a framework for measuring fair value and requires certain disclosures about how fair value is determined. Fair value is defined as the price that would be received upon the sale of an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date.

The accounting guidance also establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1 — Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 — Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other

inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 — Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. An assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability. Changes in the ability to observe valuation inputs may result in a reclassification of levels of certain securities within the fair value hierarchy. The Company recognizes transfers into and out of levels within the fair value hierarchy in the period in which the actual event or change in circumstances that caused the transfer occurs.

As of September 30, 2023 and December 31, 2022, Level 1 securities consist of U.S. Treasury and money market funds, for which the carrying amounts are based on the quoted market prices in active markets.

As of September 30, 2023 and December 31, 2022, Level 2 securities consist of highly rated commercial paper, U.S. agency securities, and asset-backed securities, for which fair value is determined through the use of models or other valuation methodologies.

During the periods presented, the Company did not have any Level 3 securities.

The following tables set forth the financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy as of September 30, 2023 and December 31, 2022 (in thousands):

	September 30, 2023			
	Total Fair Value	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds (1)	$182,988	$182,988	$ —	$ —
Commercial paper (1)	—	—	—	—
Total cash equivalents	182,988	182,988	—	—
Marketable securities:				
U.S. treasuries(2)	4,456	4,456	—	—
Commercial paper(2)	7,937	—	7,937	—
U.S. agency securities(2)	36,626	—	36,626	—
Asset-backed securities(2)	1,979	—	1,979	—
Total marketable securities	50,998	4,456	46,542	—
Total cash equivalents and marketable securities	$233,986	$187,444	$46,542	$ —

	December 31, 2022			
	Total Fair Value	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds (1)	$ 45,739	$ 45,739	$ —	$ —
Commercial paper (1)	1,991	—	1,991	—
Total cash equivalents	47,730	45,739	1,991	—
Marketable securities:				
U.S. treasuries(2)	65,391	65,391	—	—
Commercial paper(2)	115,061	—	115,061	—
U.S. agency securities(2)	53,455	—	53,455	—
Asset-backed securities(2)	1,914	—	1,914	—
Total marketable securities	235,821	65,391	170,430	—
Total cash equivalents and marketable securities	$283,551	$111,130	$172,421	$ —

(1) Included within cash and cash equivalents on the condensed balance sheets.(2)Included within investments in marketable securities, current and investments in marketable securities, non-current on the condensed balance sheets.

4. Marketable Securities

All marketable securities were considered available-for-sale as of September 30, 2023 and December 31, 2022. The amortized cost, gross unrealized holding gains or losses, and fair value of the Company's marketable securities by major security type are summarized in the tables below (in thousands):

	September 30, 2023			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Available-for-sale securities				
U.S. treasuries	$ 4,469	$ —	$ (13)	$ 4,456
Commercial paper	7,942	—	(5)	7,937
U.S. agency securities	36,700	—	(74)	36,626
Asset-backed securities	1,982	—	(3)	1,979
Total available-for-sale securities	$ 51,093	$ —	$ (95)	$50,998

	December 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Available-for-sale securities				
U.S. treasuries	$ 65,807	$ —	$ (416)	$ 65,391
Commercial paper	115,381	13	(333)	115,061
U.S. agency securities	53,767	15	(327)	53,455
Asset-backed securities	1,914	—	—	1,914
Total available-for-sale securities	$236,869	$ 28	$ (1,076)	$235,821

The amortized cost of available-for-sale securities is adjusted for amortization of premiums and accretion of discounts to maturity. As of September 30, 2023, the aggregate fair value of securities with remaining maturities of less than one year held by the Company in an unrealized loss position was $51.0 million. The Company has

the intent and ability to hold such securities until recovery and has determined that there has been no material change to its credit risk. As a result, the Company determined it did not hold any investments with a credit loss at September 30, 2023.

There were no realized gains or losses recognized on the sale or maturity of available-for-sale securities during the three and nine months ended September 30, 2023, and as a result, there were no reclassifications out of accumulated other comprehensive gain (loss) for the same periods.

5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Advances to suppliers	$ —	$ 2,486
Prepaid insurance	1,227	1,343
Other prepaid expenses	3,550	3,307
Total prepaid expenses and other current assets	$ 4,777	$ 7,136

Property and Equipment, Net

Property and equipment, net as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Furniture and fixtures	$ 1,264	$ 321
Computers and network equipment	—	251
Lab equipment	—	12,521
Leasehold improvements	12,108	304
Construction-in-progress	—	12,440
Total property and equipment	13,372	25,837
Less: accumulated depreciation	(838)	(3,207)
Total property and equipment, net	12,534	22,630

Depreciation expense for the three and nine months ended September 30, 2023 was $0.8 million and $2.3 million, respectively. Depreciation expense for the three and nine months ended September 30, 2022 was $0.7 million and $1.7 million, respectively.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Professional fees	$ 178	$ 367
Early exercise liability	34	150
Other accrued expenses	221	1,354
Accrued employee termination benefits	2,983	—
Total accrued expenses and other current liabilities	$ 3,416	$ 1,871

6. Significant Agreements

Stanford Exclusive License Agreement and Option Agreement

In December 2020, the Company entered into an exclusive license agreement (the "License Agreement") with The Board of Trustees of the Leland Stanford Junior University (Stanford), pursuant to which Stanford granted the Company a worldwide license to specified technology and patent rights to develop, manufacture and commercialize human prophylactic and therapeutic products. Other than with respect to specified, broadly applicable assays and procedures and subject to retained rights by Stanford, the license is exclusive with respect to human prophylactic and therapeutic products for the treatment of SCD, XSCID and beta thalassemia. The license is non-exclusive with respect to those broadly applicable assays and procedures and with respect to all human prophylactic and therapeutic products other than for the treatment of SCD, XSCID and beta thalassemia.

Pursuant to the License Agreement, the Company paid an upfront license fee of $50.0 thousand and as additional consideration for the license, the Company agreed to issue to Stanford approximately 0.6 million shares of common stock. As of December 31, 2020, the Company recorded its obligations to issue Stanford shares of common stock at an estimated fair value of $2.8 million to additional paid in capital. The shares of common stock were expected to be issued when Stanford provided the inventors' names for allocation of the shares. Stanford also received an option to purchase up to 10% of newly issued shares in the future private financings at the price paid by other participating investors. During the year ended December 31, 2021, the Company entered into an amendment to the License Agreement, pursuant to which it extended the time when the shares would be issued to May 7, 2021.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right as described below.

The acquisition of the exclusive license, including patent rights and know-how, and clinical supplies was accounted for as an asset acquisition and as the acquired technology and inventories did not have an alternative use, the total consideration of $2.8 million was recorded as research and development expense in the statements of operations and comprehensive loss for the year ended December 31, 2020.

In connection with the License Agreement, the Company reimbursed Stanford $0.2 million for previously incurred patent costs, which were recorded in general and administrative expenses for the year ended December 31, 2020 and in addition, is obligated to reimburse future patent costs. The Company is also obligated to pay annual maintenance fees as follows: $5.0 thousand in the first year, $10.0 thousand in each year 2 and 3, $25.0 thousand in each year 3 through 6, $50.0 thousand each subsequent year until first commercial sale and $200.0 thousand each subsequent year after the first commercial sale. No fees were recorded during the three and nine months ended September 30, 2023. The Company did not record any patent fees during the three and nine months ended September 30, 2023.

The Company is obligated to make future development and regulatory milestone payments in total of up to $5.3 million, sales based milestone payments of up to $7.5 million and royalties on future sales at percentage rates ranging in the low single digits. In addition, if the Company receives any sublicense income, it is required to share it with Stanford as a certain percentage defined for each milestone in the License Agreement. The Company will record the maintenance fees, when payable, and will record milestones when contingencies are resolved and milestones are due. No milestones were achieved and recorded as of September 30, 2023.

In January 2021, the Company entered into an option agreement (the "First Option Agreement") with Stanford, pursuant to which Stanford granted the Company the right to obtain a license to specified patent rights

relating to human prophylactic and therapeutic products. The Company may exercise the option in whole or in part to obtain a license under one or more of the optioned patent rights.

Subject to the Company's exercise of the option under the First Option Agreement and its execution of an amendment to the License Agreement that incorporates the optioned patent rights and any optioned technology, the Company has agreed to issue to Stanford 132,137 shares of its common stock and pay a license execution fee of $10.0 thousand.

The term of the First Option Agreement expires 18 months after its effective date, subject to the Company's right to extend such expiration date by up to an additional one year upon notice to Stanford and by another additional one year upon the reasonable agreement of Stanford. The First Option Agreement will terminate if the License Agreement terminates. On June 23, 2022, the Company exercised its right to extend the term of the First Option Agreement for an additional year. On June 6, 2023, the Company and Stanford agreed to extend the term of the First Option Agreement for another additional year. As of September 30, 2023, the Company had not exercised the option under the First Option Agreement and no fees have been paid for the First Option Agreement.

In April 2021, the Company entered into an option agreement (the "Second Option Agreement") with Stanford to negotiate the license for additional technologies from Stanford. Pursuant to the Second Option Agreement, the Company agreed to pay Stanford option fees in an aggregate amount of $30.0 thousand over the term of the option. On April 13, 2022, the Company entered into an amendment to the Second Option Agreement which extended the term for an additional year. On March 8, 2023, the Company terminated the Second Option Agreement without exercising the option to negotiate a license for additional technologies from Stanford. No maintenance fees were paid during the three and nine months ended September 30, 2023.

LCGM Service Agreement

On August 30, 2021, the Company entered into a Master Manufacturing and Service Agreement with the Laboratory for Cell & Gene Medicine at Stanford ("LCGM MSA"). Pursuant to the LCGM MSA, LCGM will conduct clinical manufacturing, release testing, and product release for nula-cel in the Company's Phase 1/2 CEDAR clinical trial to treat SCD. During 2021, the Company entered into various Statements of Work under the LCGM MSA under which it received technology transfer and related services for HBB Beta-Globin Gene Variant for SCD, manufacturing engineer test runs, the exclusive use of a manufacturing suite at the LCGM facility, and Phase 1/2 CEDAR clinical development and manufacturing of the HBB Variant for SCD. During the three months ended September 30, 2023, the Company did not recognize any research and development expense in connection with the LCGM MSA. The Company recognized $1.1 million during the nine months ended September 30, 2023. During the three and nine months ended September 30, 2022, the Company recognized $1.7 million and $4.5 million, respectively, in research and development expense in connection with the LCGM MSA. As of September 30, 2023, the Company does not expect to incur any additional expenses associated with the LCGM MSA.

IDT License Agreement

On June 7, 2021, the Company entered into a License Agreement ("IDT License Agreement") with Integrated DNA Technologies, Inc. ("IDT"). Pursuant to the IDT License Agreement, IDT granted the Company and its affiliates a worldwide, non-exclusive, sublicensable license to research and develop products incorporating HiFi Cas9 protein variants for use in human therapeutic applications for SCD, XSCID and Gaucher disease (the "Field") and a worldwide, exclusive, sublicensable license to commercialize such products in the Field. The Company has also been granted the right to expand the licensed Field to include human therapeutic applications in the additional fields of beta thalassemia disorder and lysosomal storage disorders upon the payment of an exercise fee in the amount of $0.5 million per additional field or $1.0 million for both additional fields.

In consideration of the licenses and rights granted to the Company under the IDT License Agreement, the Company agreed to pay to IDT an upfront payment in the amount of $3.0 million and up to $5.3 million (or $8.8 million if the Company elects to expand the Field as described above to include both the beta thalassemia and lysosomal storage disorders fields) in total regulatory milestone payments. Each regulatory milestone payment is payable once on an indication-by-indication basis. In addition, the Company has agreed to pay IDT a low single-digit royalty on the net sales of products, subject to reductions in specified circumstances. As the acquisition of the license was accounted for as an asset acquisition and as the acquired technology did not have an alternative use, the total consideration of $3.0 million was recorded as research and development expense in the statements of operations and comprehensive loss during the year ended December 31, 2021.

The IDT License Agreement remains in effect on a country-by-country and product-by-product basis until the expiration of the royalty term for such product in such jurisdiction. The Company and IDT each have the right to terminate the IDT License Agreement for the other party's material breach of its obligations under the IDT License Agreement, subject to specified rights to cure. Additionally, the Company may terminate the IDT License Agreement for any reason upon written notice.

During the three and nine months ended September 30, 2023, the Company has not recognized any research and development expense in connection with the IDT License Agreement. There are no milestones probable as of September 30, 2023 and 2022; therefore, no milestone payments have been recognized in the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023, the Company does not expect to incur any additional expenses associated with the IDT License Agreement.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, the Company entered into an asset purchase agreement (the "APA") with a third party pursuant to which the Company sold to the counterparty, concurrently with the execution of the APA, certain assets related to the Company's non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate as well as royalties on net sales by the acquirer of certain products incorporating the acquired technology, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the three and nine months ended September 30, 2023, the Company recognized a loss on disposal of $0.1 million, which was recorded in other income. The Company will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of September 30, 2023.

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, the Company entered into an LOA with a third party pursuant to which the Company exclusively licensed to the counterparty, and granted the counterparty, an option to acquire certain intellectual property and materials related to the Company's nula-cel program and related pre-clinical platform assets. Exercise of the option is contingent on the counterparty timely achieving a financing milestone, and all rights to the intellectual property and materials will revert to the Company if the milestone is not achieved or if the counterparty elects not to exercise the option. In return for this license and option, the Company received an equity interest in the counterparty representing 20% of all outstanding shares on a fully diluted basis. As a result of the 20% equity interest, the Company has the ability to exert significant influence over the counterparty and accounts for the interest as an equity method investment. The Company records its proportionate share of investee's equity in earnings or losses based on the most recently available financial information.

The Company assessed the entity under the VIE model to assess whether to apply the consolidation guidance in accordance with ASC 810. The Company holds variable interests in the entity, and the entity was determined to be a VIE which is not consolidated as it is determined the Company lacks the power to direct the activities that most significantly impact the entity's economic performance. The condensed balance sheets do not contain assets and liabilities related to the Company's interest in the non-consolidated VIE. Additionally, the Company's maximum exposure to loss is limited to the carrying value of the equity interest in the counterparty. No arrangements exist where additional financial support would need to be provided by the Company.

The 20% equity interest in the counterparty had minimal value upon execution of the LOA and the Company did not record any amount related to the equity interest as of September 30, 2023 or for the three and nine months ended September 30, 2023. As of September 30, 2023, the counterparty has not achieved the financial milestone and does not have the right to exercise the option.

7. Commitments and Contingencies

Research and Development Agreements

The Company enters into contracts in the normal course of business with CROs for clinical trials, with CMOs or other vendors for preclinical and clinical studies, supplies and other services and products for operating purposes. These contracts generally provide for termination on notice or may have a potential termination fee if a purchase order is cancelled within a specified time. As of September 30, 2023 and December 31, 2022, there were no amounts accrued related to termination and cancellation charges and the Company does not expect to incur any additional expenses associated with termination and cancellation charges.

License Agreements

The Company enters into license agreements (Note 6), pursuant to which the Company may acquire or license other patents, patent applications or know-how from various third parties to access intellectual property covering product candidates that the Company is developing. Under these acquisitions or licensing agreements, the Company may be liable for certain diligence obligations and payments, which are contingent upon achieving various development, regulatory and commercial milestones. Also, pursuant to the terms of some of these license agreements, when and if commercial sales of a product commence, the Company may be obligated to pay royalties to such third parties on net sales of the respective products. No such milestones were achieved or probable as of September 30, 2023 and December 31, 2022.

Legal Contingencies

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of business. The Company records a liability for such matters when it is probable that future losses will be incurred and that such losses can be reasonably estimated. Significant judgment by the Company is required to determine both probability and the estimated amount. Management is currently not aware of any legal matters that could have a material adverse effect on its financial position, results of operations or cash flows.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of September 30, 2023 and December 31, 2022, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

8. Operating Leases

As of September 30, 2023, the current and non-current portions of the total liability for operating leases was $3.4 million and $49.7 million, respectively. As of September 30, 2023, the weighted average remaining lease term on the operating leases is 110 months. The weighted average incremental borrowing rate used to determine the operating lease liabilities included on the condensed balance sheet was 10.9%.

Facility leases

On January 27, 2021, the Company entered into a new lease agreement for office and lab space in South San Francisco, California that included two office suites. The lease terms for the two office suites commenced during July and August 2021, respectively. The term of the lease is 44 months for the first office suite and 43 months for the second office suite with an option to extend the term for an additional two years on the same terms and conditions. This option to extend the lease term was not determined to be reasonably certain and therefore has not been included in the Company's calculation of the associated operating lease liability under ASC 842. The corresponding right-of-use assets and lease liabilities related to the two office suites were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

In August 2023, the Company subleased one of its office suites in the South San Francisco lease for 20 months starting from August 2023 for aggregate sublease payments of $0.5 million. The sublease income, while it reduces the rent expense, is not considered in the value of the right-of-use assets or lease liabilities. The Company's sublease income was $0.1 million for the three and nine months ended September 30, 2023.

On November 10, 2021, the Company entered into a sublease agreement for office and lab space located in Brisbane, California. The sublease expires on December 6, 2023. The corresponding right-of-use assets and lease liabilities related to the sublease were recorded on the Company's balance sheet upon the lease commencement date, which was the date the Company was deemed to have obtained control of the premises.

On December 16, 2021, the Company entered into a lease agreement with Bayside Area Development, LLC ("Bayside") for 85,165 square feet of office and laboratory space in South San Francisco, CA. The lease for the office and laboratory space commenced in April 2023. The term of the lease is 120 months with the option to extend the term up to an additional ten years. This option to extend the lease term was not determined to be reasonably certain and therefore has not been included in the Company's calculation of the associated operating lease liability under ASC 842. During the second quarter of 2023, the Company took possession of the Bayside lease and recognized a $32.0 million right-of-use asset and corresponding lease liability upon the lease commencement date. In addition, the Company recognized $27.2 million in leasehold improvements. Bayside provided a tenant improvement allowance of up to $14.9 million, which was fully utilized and recorded in lease liability.

In October 2023, the Company entered into a sublease agreement and amendment to the original master lease with the landlord to accelerate the termination date of the Bayside lease, and in November 2023, the Company entered into an amendment to the original lease agreement to reassign the second suite of the South San Francisco lease (Note 14).

As of September 30, 2023, the Company had operating lease right-of-use assets of $13.2 million and operating lease liabilities of $53.1 million related to the office suite leases recorded on its condensed balance sheet.

Embedded leases

On May 10, 2021 and August 30, 2021, the Company and LCGM entered into the LCGM MSA and Statement of Work #3 ("SOW #3"), respectively, for the exclusive use of a manufacturing suite at the LCGM

facility. Pursuant to the terms of SOW #3, LCGM agreed to provide the Company with certain dedicated space for the clinical manufacturing, release testing, and product release in the Company's Phase 1/2 CEDAR clinical trial to treat sickle cell disease. The Company concluded that the agreement contains an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The agreement includes fixed lease payments of $5.6 million from inception of lease through April 30, 2023, the expiration date of SOW #3. As of September 30, 2023, the Company has paid all fixed lease payments on the LCGM embedded lease.

The Company and Explora BioLabs, Inc. ("Explora") entered into a License Service Agreement and Master Services Agreement (together, the "Explora Agreements") on November 17, 2021 and December 16, 2021, respectively. Pursuant to the terms of the Explora Agreements, Explora agreed to provide a certain dedicated space to perform in vitro or in vivo studies, obtain or house research animals, and provide scientific or technical consultation to the Company. The Company concluded that the Explora Agreements contain an embedded lease as the Company controls the use of a dedicated manufacturing suite and the equipment therein. The Explora Agreements contain fixed lease payments of $0.7 million from inception of lease through November 2023. As of September 30, 2023, the Company does not have any remaining obligations related to the Explora embedded lease.

As of September 30, 2023, the Company did not have any operating lease right-of-use assets and operating lease liabilities related to the embedded leases recorded on its condensed balance sheet.

Operating Lease Obligations

As of September 30, 2023, the future minimum lease payments for the Company's operating leases for each of the years ending December 31 were as follows (in thousands):

	Amount
2023 (Remaining three months)	$ 2,155
2024	9,177
2025	8,336
2026	8,223
2027	8,493
Thereafter	50,103
Total undiscounted lease payments	86,487
Present value adjustment	(33,376)
Total net lease liabilities	$ 53,111

Lease expense was $2.4 million and $6.4 million for the three and nine months ended September 30, 2023, respectively. Lease expense was $1.7 million and $5.0 million for the three and nine months ended September 30, 2022, respectively.

Under the terms of the remaining lease agreements, the Company is also responsible for certain variable lease payments that are not included in the measurement of the lease liability. Variable lease payments for operating leases were $0.8 million and $1.8 million for the three and nine months ended September 30, 2023, respectively, including non-lease components such as common area maintenance fees, taxes, and insurance. Variable lease payments for operating leases were $0.3 million and $1.0 million for the three and nine months ended September 30, 2022, respectively.

The following information represents supplemental disclosure for the statement of cash flows related to the operating leases (in thousands):

	September 30, 2023
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows under operating leases	$ 4,817

9. Common Stock

As of September 30, 2023 and December 31, 2022, the Company was authorized to issue 300,000,000 shares of its common stock with $0.00001 par value per share. Each share of the Company's common stock is entitled to one vote. In connection with the IPO in June 2021, all outstanding shares of redeemable convertible preferred stock were converted into 30,761,676 shares of common stock. The IPO closed on June 29, 2021, pursuant to which the Company issued and sold 14,000,000 shares of its common stock at a public offering price of $17.00 per share.

On June 29, 2021, the underwriters also exercised their option to purchase an additional 2,100,000 shares of common stock at the IPO price, less the underwriting discounts and commissions. The closing of the offering of the additional shares occurred on July 2, 2021. The Company issued and sold 2,100,000 shares of its common stock at a public offering price of $17.00 per share.

Shares Reserved for Future Issuance

As of September 30, 2023 and December 31, 2022, the Company reserved common stock for future issuances as follows:

	September 30, 2023	December 31, 2022
Outstanding stock option awards	6,380,515	7,755,303
Shares available for future stock option grants	9,831,161	5,382,907
ESPP shares available for future grants	1,253,729	754,951
Total shares reserved for future issuance	17,465,405	13,893,161

Founders' and Investor's Restricted Common Stock

In March 2020, the Board approved and in April 2020, the Company issued 6,081,413 shares of its common stock to its founders and 2,467,104 shares of its common stock to its investor at the purchase price of $0.00002 per share. As of December 31, 2020, the investor's shares were fully vested and a portion of the shares issued were subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The shares of the Company's common stock issued to its founders for their services as an employee, advisor, or consultant vest monthly over four years with one year cliff from the vesting commencement date. The vesting commencement date was the date of the initial closing of the Series A preferred stock financing or June 24, 2020. Pursuant to the restricted stock purchase agreements with each of the founders, the vesting of the founders' common stock shares could be accelerated upon the occurrence of certain events, including signing of the term sheet for the license with Stanford, a change in control, or if the founder's service is terminated by the Company without cause. The Company signed the term sheet with Stanford in June 2020, and as a result, an aggregate of 912,212 shares of founders' common stock vested pursuant to the acceleration terms. As of September 30, 2023, certain founder agreements were terminated without cause and shares were accelerated.

If a founder terminates the service relationship with the Company during the vesting period, the Company may repurchase any unvested restricted common stock at the price per share equal to the lower of (i) the original purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right, as described below. The repurchase right lapses in 180 days after the termination of the founder's service or employment. During the vesting term, holders of founders' common stock awards are deemed to be common stockholders and have the right to receive dividends and voting rights.

The founders' shares of common stock are also subject to the Company's option to repurchase per the Stanford Adjustment Repurchase Right, as described below.

The Company accounts for shares issued to founders as equity compensation awards and the estimated fair value at the grant date was minimal. The Company did not repurchase any founders' common stock awards during the three months ended September 30, 2023. During the nine months ended September 30, 2023, the Company repurchased 152,694 shares of founders' common stock awards. 647,803 and 1,938,430 shares of founders' common stock awards were unvested and expected to vest in 0.7 years and 1.5 years as of September 30, 2023 and December 31, 2022, respectively.

Stanford Adjustment Repurchase Right

Upon the issuance of shares of common stock to Stanford pursuant to the License Agreement, as discussed in Note 6, the Company has a right to repurchase from each founder and an investor a number of shares of common stock equal to the number of shares issued to Stanford multiplied by the applicable number of shares issued to the founder or investor, as applicable, divided by 7,273,848 shares (a fully diluted number of shares of the Company at the end of March 2020, after the founders' and investor's shares were approved by the board of directors). The Stanford Adjustment Repurchase Right may be exercised by the Company within six months following the date of the issuance of the shares of common stock to Stanford. The repurchase price per share is equal to the lower of (i) the purchase price, subject to adjustment in the event of any reorganization, recapitalization, reclassification, etc., or (ii) the current fair market value as of the date the Company elects to exercise its Stanford Adjustment Repurchase Right.

On May 7, 2021, the Company issued an aggregate of 640,861 shares of the Company's common stock to Stanford and certain individuals designated by Stanford in consideration for rights granted to the Company under the Company's exclusive license agreement.

On June 18, 2021, the Company exercised its right to repurchase an aggregate of 624,845 shares from each founder and investor under the Stanford Adjustment Repurchase Right. As of September 30, 2023, the Company has not exercised the right to repurchase the remaining 16,016 shares.

The Company accounts for the founders and investor's shares of restricted common stock as equity share-based awards.

10. Equity Incentive Plans

2020 Stock Option and Grant Plan

Prior to the effectiveness of the registration statement on Form S-1 (File No. 333-256838) for its IPO, the Company granted share-based awards under the 2020 Stock Option and Grant Plan, as amended (the "2020 Plan"). The Company was authorized to grant under the 2020 Plan incentive stock options, nonqualified stock options, restricted stock awards, restricted stock units and other share-based awards to the Company's officers, employees, directors and consultants. Options under the 2020 Plan could be granted for periods of up to 10 years

and at prices no less than 100.0% of the estimated fair value of the shares on the date of grant as determined by the Board, provided, however, that the exercise price of an incentive stock option granted to a 10.0% stockholder shall not be less than 110.0% of the estimated fair value of the shares on the date of grant and the option is not exercisable after the expiration of five years from the date of grant. Options generally vest monthly over four years with or without one year cliff vesting. Per the 2020 Plan, granted options may be early exercised prior to vesting and the Company will issue shares of restricted stock upon the early exercise with vesting terms consistent with the original grant. Upon completion of the Company's IPO, the remaining shares available for issuance under the 2020 Plan were retired, and the Company no longer grants awards pursuant to the 2020 Plan.

2021 Stock Option and Incentive Plan

In June 2021, the Company's board of directors approved the 2021 Stock Option and Incentive Plan (the "2021 Plan") that became effective immediately prior to the date when the Company's prospectus was declared effective by the SEC on June 24, 2021. The Company initially reserved 5,636,000 shares of common stock for issuance of awards under the 2021 Plan. The 2021 Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning on January 1, 2022, by 5% of the outstanding number of shares of the Company's common stock on the immediately preceding December 31, or such lesser number of shares as determined by the Company's compensation committee. On January 1, 2022 and 2023, the number of shares of common stock available under the 2021 Plan increased by 2,900,541 shares and 2,911,088 shares, respectively pursuant to this evergreen provision of the 2021 Plan. The option exercise price of each option will be determined by the Company's compensation committee but generally may not be less than 100% of the fair market value of the Company's common stock on the date of grant. The term of each option will be fixed by the Company's compensation committee and may not exceed ten years from the date of grant. The grant date fair value of all awards made under the 2021 Plan and all other cash compensation paid by the Company to any non-employee director for services as a non-employee director in any calendar year may not exceed $1.0 million for the first year of service and $750.0 thousand for each year of service thereafter.

As of September 30, 2023, there were 9,831,161 shares available for future issuance under the 2021 Plan.

Restricted Stock Awards

During the year ended December 31, 2020, the Company issued 832,983 shares as restricted stock awards under the 2020 Plan. The purchase price of the restricted common stock awards was fair value as determined by the Board at the issuance date. The shares vest monthly over four years with the one-year cliff vesting from the grant date. Upon termination of employment, the Company has the right to repurchase any unvested restricted shares. The repurchase price for unvested shares of common stock will be the lower of (i) the fair market value on the date of repurchase or (ii) their original purchase price. There were no grants of restricted stock awards for the three and nine months ended September 30, 2023 and 2022.

The Company accounted for restricted stock awards as early exercised options and recognized a liability in other liabilities when cash was received for the purchase of shares of restricted stock awards. As shares of restricted stock awards vest, the Company reclassified the liability to common stock and additional paid in capital. As of September 30, 2023 and December 31, 2022, the Company recorded a minimal liability for restricted stock awards included in other liabilities.

There were 1,542 and 11,136 restricted stock award shares canceled and repurchased during the three and nine months ended September 30, 2023, respectively. There were 5,140 shares canceled and repurchased during the three and nine months ended September 30, 2022. There were 703,035 and 553,443 shares of restricted stock vested as of September 30, 2023 and December 31, 2022, respectively.

Employee Stock Purchase Plan

In June 2021, the Company's board of directors and stockholders approved the 2021 Employee Stock Purchase Plan (the "ESPP") which became effective upon the IPO. Pursuant to the ESPP, certain employees of

the Company, excluding consultants and non-employee directors, are eligible to purchase common stock of the Company at a reduced rate during offering periods. The ESPP permits participants to purchase common stock using funds contributed through payroll deductions, subject to a calendar year limit of $25,000 and at a purchase price of 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the applicable purchase date, which will be the final trading day of the applicable purchase period. The ESPP has two annual purchase periods extending from June to November and December to May.

The Company recorded a minimal liability for ESPP in accrued liabilities as of September 30, 2023 and December 31, 2022. The Company did not issue any shares during the three months ended September 30, 2023 and 2022. The Company issued 65,222 shares and 207,137 shares under the ESPP during the nine months ended September 30, 2023 and 2022, respectively.

Incentive Stock Options and Nonqualified Stock Options

Stock options issued under the 2020 Plan and 2021 Plan generally vest over a four-year period and expire ten years from the date of grant. Certain options provide for accelerated vesting if there is a change in control, as defined in the individual award agreements.

A summary of option activity under the 2020 Plan and the 2021 Plan during the nine months ended September 30, 2023 is as follows:

	Number of Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2022	7,755,303	$ 8.47	8.67	$ 794
Options granted—2021 Plan	3,223,400	$ 2.22		
Options exercised	(65,414)	$ 0.52		
Options cancelled	(4,532,774)	$ 6.50		
Outstanding as of September 30, 2023	6,380,515	$ 6.79	5.6	$ 695
Exercisable	4,231,849	$ 6.86	4.4	$ 472
Vested and expected to vest as of September 30, 2023	6,380,515	$ 6.79	5.6	$ 695

Aggregate intrinsic value represents the difference between the fair value of the underlying common stock and the exercise price as of September 30, 2023. The weighted-average grant date fair value of options granted during the three and nine months ended September 30, 2023 was $1.89 and $1.56 per share, respectively. There were 10,367 and 65,414 stock options exercised during the three and nine months ended September 30, 2023, respectively.

Early Exercise of Stock Options

The terms of the 2020 Plan permit the exercise of options granted prior to vesting, subject to required approvals. The unvested shares are subject to the repurchase right upon termination of employment at the original purchase price. The repurchase right lapses in 180 days after the termination of the employee's employment. Shares purchased by employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest according to their respective vesting schedules. Cash received for early exercised stock options is recorded as other liabilities on the balance sheet and is reclassified to common stock and additional paid-in capital as such shares vest. During the three and nine months ended

September 30, 2023, the Company repurchased 26,188 and 216,656 shares, respectively, that were previously early exercised. The Company repurchased 73,735 shares and 124,448 shares that were previously early exercised during the three and nine months ended September 30, 2022, respectively.

As of September 30, 2023 and December 31, 2022, 111,600 and 554,695 shares, respectively, remained subject to the right of repurchase as a result of the early exercised stock options. As of September 30, 2023, the Company has a minimal remaining liability related to early exercised shares, which is recorded within accrued expenses and other liabilities on the Company's condensed balance sheets.

Stock-Based Compensation Expense

The following table presents the components of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Restricted stock awards and founders' common stock awards	$ 1	$ 2	$ 5	$ 6
ESPP	1	58	96	316
Stock options	2,159	3,150	8,168	9,590
Total stock-based compensation expense	$2,161	$ 3,210	$8,269	$9,912

The above stock-based compensation expense also includes the expenses of $0.4 million and $1.1 million related to stock options issued to non-employees during the three and nine months ended September 30, 2023, respectively. There was $0.8 million and $0.9 million in stock-based compensation expense for options issued to non-employees during the three and nine months ended September 30, 2022.

The following table presents the classification of stock-based compensation expense for the Company's stock-based awards for the periods presented (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Research and development expenses	$ 37	$ 1,249	$ 1,904	$ 3,881
General and administrative expenses	2,124	1,961	6,365	6,031
Total stock-based compensation expense	$ 2,161	$ 3,210	$ 8,269	$ 9,912

As of September 30, 2023 and December 31, 2022 there was $9.9 million and $31.0 million of unrecognized stock-based compensation expense related to the employee and non-employee awards, which is expected to be recognized over a weighted-average period of 1.9 and 2.6 years, respectively.

11. Restructuring Activities

In February 2023, the Company's board of directors approved a restructuring plan (the "First Restructuring Plan") to reduce the Company's operating costs and better align its workforce with the needs of its business. The First Restructuring Plan eliminated approximately 50% of the Company's workforce.

Employees affected by the First Restructuring Plan obtained involuntary termination benefits that are provided pursuant to a one-time benefit arrangement. For employees who were notified of their termination in February 2023 and have no requirements to provide future service, the Company recognized the liability for the termination benefits in full at fair value in February 2023. For employees who are required to render services

beyond a minimum retention period to receive their one-time termination benefits, the Company recognized the termination benefits ratably over their future service periods. The service periods began in February 2023 and ended at various dates through June 2023. The Company has incurred approximately $3.4 million of employee termination benefits expense to implement the First Restructuring Plan.

In August 2023, the Company's board of directors approved a second restructuring plan (the "Second Restructuring Plan"; together with the First Restructuring Plan, the "Restructuring Plans") to further reduce the Company's operating costs and align its workforce with the needs of its business. The Second Restructuring Plan eliminated approximately an additional 33.1% of its total workforce, and in aggregate, 78.1 % of its total workforce. Employees affected by the Second Restructuring Plan obtained involuntary termination benefits that are provided to an ongoing benefit arrangement. Accordingly, the Company is recognizing termination benefits upon announcement of termination to all employees. The Company expects to incur approximately $3.5 million of employee termination benefits expense to implement the Second Restructuring Plan.

In addition, the Company determined that as of September 30, 2023, it was reasonably likely to incur additional employee termination benefits expense for its remaining employees within the next twelve months. Accordingly, it recognized termination benefits for the remaining employees totaling $1.0 million.

The following table summarizes the Company's restructuring liability that is included in accrued expenses and other current liabilities in the accompanying condensed balance sheet:

	Nine Months Ended September 30, 2023
Accrued employee termination benefits beginning balance	$ —
Employee termination benefits charges incurred during the period	7,883
Amounts paid or otherwise settled during the period	(4,900)
Accrued employee termination benefits as of September 30, 2023	$ 2,983

In addition, the board of directors determined that it was in the best interests of the Company and its stockholders to put in place arrangements designed to provide that the Company will have the continued dedication and commitment of those employees, including executives, determined to be key to the Company's planned go-forward operations. The Board approved, and management implemented, a retention program for certain employees staying with the Company which includes cash retention bonuses totaling $4.2 million for certain retained employees provided that they remain within the Company through the requisite service period, which is the earlier of March 1, 2024 or the termination date upon a Restructuring Plan. As a result, these cash retention bonuses are being accrued over the requisite service period, with $2.8 and $4.0 million recognized during the three and nine months ended September 30, 2023, respectively, and included within general and administrative and research and development expenses in the condensed statements of operations. During the three and nine months ended September 30, 2023, the Company paid $2.1 million in retention bonuses to employees impacted by the Second Restructuring Plan for fulfilling their requisite service periods.

In June 2023, the Company committed to a plan to sell certain of its lab equipment associated with the Restructuring Plan. During the three months ended September 30, 2023, the Company implemented a plan to sell its remaining lab equipment as well as other fixed assets not transferred to the Bayside lease. As of September 30, 2023, it disposed of the majority of its assets, with a minimal amount of assets on the condensed balance sheet meeting the criteria of held for sale. These assets are recognized at the lower of cost or fair value less cost to sell using market approach. The fair value of these assets are classified as Level 3 in the fair value

hierarchy due to a mix of unobservable inputs utilized such as independent research in the market as well as actual quotes from market participants. Subsequent changes to the estimated selling price of assets held for sale are recorded as gains or losses to the condensed statements of operations and comprehensive loss wherein the recognition of subsequent gains is limited to the cumulative loss previously recognized. During the three and nine months ended September 30, 2023, the Company recorded impairment charges and loss on disposal of assets, which was included in restructuring and impairment costs in the condensed statements of operations and comprehensive loss, of $5.3 million and $6.8 million, respectively.

In connection with the Restructuring Plans, the Company has determined that it will not utilize the Bayside and South San Francisco leases for purposes of its own operations. In August 2023, the Company subleased one of its office suites in the South San Francisco lease for 20 months starting from August 2023 for aggregate sublease payments of $0.5 million. In October 2023, the Company entered into a sublease agreement and amendment to the original master lease with the landlord to accelerate the termination date of the Bayside lease and in November 2023, the Company entered into an amendment to the original lease agreement to reassign the second suite of the South San Francisco lease (Note 14). The Company performed a recoverability test by comparing the future cash flows attributable to the asset group to the carrying value of the long-lived assets. Future cash flows were estimated using comparable laboratory and office facilities discounted at a market discount rate over the remaining term of the Company's lease. During the three and nine months ended September 30, 2023, the Company recorded a non-cash impairment of $1.4 million and $36.4 million, respectively, to the right-of-use asset and related leasehold improvement, which was included in restructuring and impairment costs in the condensed statements of operations and comprehensive loss.

The Company entered into an asset purchase agreement with a third party pursuant to which the Company sold to the counterparty, concurrently with the execution of the APA, certain assets related to the Company's non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, as well as royalties on net sales by the acquirer of certain products incorporating the acquired technology, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million.

In addition, the Company also entered into an LOA with another third party pursuant to which the Company exclusively licensed to the counterparty, and granted the counterparty an option to acquire, certain intellectual property and materials related to the Company's nulabeglogene autogedtemcel (nula-cel) program and related pre-clinical platform assets. Exercise of the option is contingent on the counterparty timely achieving a financing milestone, and all rights to the intellectual property and materials will revert to the Company if the milestone is not achieved or if the counterparty elects not to exercise the option. In return for this license and option, the Company received an equity interest in the counterparty representing 20% of all outstanding shares on a fully diluted basis.

12. Net Loss Per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders, which excludes shares which are legally outstanding, but subject to repurchase by the Company (in thousands, except share and per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator:				
Net loss	$ (22,485)	$ (24,682)	$ (101,733)	$ (76,453)
Denominator:				
Weighted-average common shares outstanding	57,977,907	58,189,211	58,064,472	58,085,711
Less: weighted-average unvested restricted shares and shares subject to repurchase	(720,666)	(2,983,072)	(1,315,477)	(3,494,118)
Weighted-average shares used to compute basic and diluted net loss per share attributable to common stockholders	57,257,241	55,206,139	56,748,995	54,591,593
Net loss per share attributable to common stockholders—basic and diluted:	$ (0.39)	$ (0.45)	$ (1.79)	$ (1.40)

Anti-dilutive Outstanding Shares or Equivalents

The following outstanding options, unvested shares, and ESPP shares were excluded (as common stock equivalents) from the computation of diluted net loss per common share for the periods presented as their effect would have been anti-dilutive (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Options to purchase common stock	6,380,515	7,849,590	6,380,515	7,849,590
Common stock subject to vesting or repurchase	873,062	3,236,152	873,062	3,236,152
Employee Stock Purchase Plan shares	10,437	128,888	10,437	128,888
Total	7,264,014	11,214,630	7,264,014	11,214,630

13. Income Taxes

During the nine months ended September 30, 2023 and 2022, the Company recorded a full valuation allowance on federal and state deferred tax assets since management does not forecast the Company to be in a taxable position in the near future.

14. Subsequent Events

Amendment to Lease Agreement and Sublease of Company's Premises

In October 2023, the Company entered into a sublease agreement (the "Sublease") with Soleil Labs, LLC ("Tenant") for certain premises constituting approximately 32,113 square feet of space in the building located at

233 E. Grand Avenue, South San Francisco, California (the "Premises"). The Company currently leases approximately 85,165 square feet of office space in the Premises pursuant to a Lease dated as of December 16, 2021 (as amended, the "Master Lease"), by and between the Company and Bayside Area Development, LLC (the "Landlord"). The term of the Sublease commenced on October 26, 2023 and expires on December 31, 2024. Pursuant to the Sublease, Tenant agrees to make rent payments directly to the Landlord in the amount of $183,044.10 per month for the first twelve months and $189,450.64 per month for the remainder of the Term. The rights and obligations of Tenant under the Sublease are subject to the terms of the Master Lease.

On October 26, 2023, the Company also entered into a First Amendment to Lease with the Landlord (the "Lease Amendment") to adjust the timeline for certain payments under the Master Lease and to effect the acceleration of the termination date of the Master Lease. The Lease Amendment provides that the Master Lease will terminate on December 31, 2024, and that the Landlord may further accelerate the termination date for the premises not subject to the Sublease by delivering written notice and paying the Company $20,000 per month for each month of further acceleration. At signing, the Company prepaid all remaining amounts payable during the term of the Master Lease (including the difference between the rent obligations due under the Master Lease and the rent to be paid by Tenant under the Sublease for the Premises), in an amount equal to $15.9 million, as well as a lease termination payment of approximately $20.8 million.

Partial Lease and Assignment Agreement

In addition, in November 2023, the Company entered into a sublease agreement with a third party for certain premises constituting approximately 15,212 square feet of space in the building located at 201 Haskins Way, South San Francisco, California (the "Subleased Haskins Premises"). The Company currently leases approximately 19,000 square feet of office space at the location of the Subleased Haskins Premises pursuant to a lease dated as of February 26, 2021 (as amended, the "ARE Master Lease"), by and between the Company and ARE-San Francisco No. 65, LLC ("ARE"). Pursuant to the sublease for the Subleased Haskins Premises, the third party agreed to assume all of the Company's obligations under the ARE Master Lease, including the obligation to make rent payments, as well as all of the Company's obligations under the services agreement associated with the ARE Master Lease, through the end of the term of the ARE Master Lease on March 31, 2025, and to indemnify the Company for all obligations under the ARE Master Lease and the associated services agreement, in exchange for the Company's payment to the third party of approximately $1.4 million in assumption costs.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Lenz Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Lenz Therapeutics, Inc. (the Company) as of December 31, 2021 and 2022, the related statements of operations and comprehensive loss, convertible preferred and common stock and stockholders' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2022, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2022

San Diego, California
September 6, 2023

LENZ THERAPEUTICS, INC.
BALANCE SHEETS
(in thousands, except for shares and par value)

	December 31, 2021	December 31, 2022
Assets		
Current assets:		
Cash	$ 18,307	$ 44,441
Prepaid expenses and other current assets	16	2,200
Total current assets	18,323	46,641
Property and equipment, net	10	39
Operating lease right-of-use asset	—	240
Security deposit	2	31
Total assets	$ 18,335	$ 46,951
Liabilities, convertible preferred and common stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 460	$ 4,755
Accrued liabilities	793	4,744
Total current liabilities	1,253	9,499
Operating lease liability, net	—	147
Other noncurrent liabilities	—	66
Preferred stock warrants liability	1,015	994
Total liabilities	2,268	10,706
Commitments and contingencies (Note 7)		
Convertible preferred and common stock:		
Series A convertible preferred stock, par value of $0.001 per share; 22,791,777 shares authorized, and 12,077,942 and 21,977,282 shares issued and outstanding as of December 31, 2021 and 2022, respectively	24,381	44,621
Series A-1 convertible preferred stock, par value of $0.001 per share; 2,950,548 shares authorized, and no shares and 2,950,548 issued and outstanding at December 31, 2021 and 2022, respectively	—	9,893
Class B convertible common stock, par value of $0.001 per share; 2,744,184 shares authorized, and 2,744,184 shares issued and outstanding at December 31, 2021 and 2022	5,900	5,900
Total convertible preferred and common stock	30,281	60,414
Stockholders' deficit:		
Common stock, par value of $0.001 per share; 74,358,142 Class A shares authorized, and 9,357,145 and 9,915,013 shares issued, and 9,357,145 and 9,629,171 shares outstanding at December 31, 2021 and 2022, respectively; 697,674 Class C shares authorized, none issued and outstanding at December 31, 2021 and December 31, 2022	1	10
Additional paid-in capital	251	1,098
Accumulated deficit	(14,466)	(25,277)
Total stockholders' deficit	(14,214)	(24,169)
Total liabilities, convertible preferred and common stock and stockholders' deficit	$ 18,335	$ 46,951

The accompanying notes are an integral part of these financial statements.

LENZ THERAPEUTICS, INC.
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Year ended December 31,	
	2021	2022
Revenue:		
License revenue	$ —	$ 15,000
Total revenue	—	15,000
Operating expenses:		
Research and development	4,220	21,125
Selling, general and administrative	2,474	4,358
Total operating expenses	6,694	25,483
Loss from operations	(6,694)	(10,483)
Other income (expenses), net	(869)	19
Net loss before income taxes	(7,563)	(10,464)
Provision for income taxes	—	347
Net loss and comprehensive loss	$ (7,563)	$ (10,811)
Net loss per share attributable to Class A common stockholders, basic and diluted	$ (0.81)	$ (1.14)
Weighted-average Class A common shares outstanding, basic and diluted	9,357,145	9,455,393

The accompanying notes are an integral part of these financial statements.

LENZ THERAPEUTICS, INC.
STATEMENTS OF CONVERTIBLE PREFERRED AND COMMON STOCK AND STOCKHOLDERS' DEFICIT
(in thousands, except share data)

	Convertible Preferred and Common Stock						Stockholders' Deficit				
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Class B Convertible Common Stock		Class A Common Stock		Additional Paid-in Capital	Accumulated Deficit	Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2020	814,495	$ 1,615	—	$ —	2,744,184	$ 5,900	9,357,145	$ 1	$ 55	$ (6,903)	$ (6,847)
Issuance of Series A convertible preferred stock (Tranche 2), net of issuance costs	11,263,447	22,766	—	—	—	—	—	—	—	—	—
Share-based compensation	—	—	—	—	—	—	—	—	196	—	196
Net loss	—	—	—	—	—	—	—	—	—	(7,563)	(7,563)
Balance as of December 31, 2021	12,077,942	$ 24,381	—	$ —	2,744,184	$ 5,900	9,357,145	$ 1	$ 251	$ (14,466)	$ (14,214)
Issuance of Series A convertible preferred stock (Tranche 3), net of issuance costs	9,899,340	20,240	—	—	—	—	—	—	—	—	—
Issuance of Series A-1 convertible preferred stock, net of issuance costs	—	—	2,950,548	9,893	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	—	—	—	272,026	9	126	—	135
Share-based compensation	—	—	—	—	—	—	—	—	721	—	721
Net loss	—	—	—	—	—	—	—	—	—	(10,811)	(10,811)
Balance as of December 31, 2022	21,977,282	$ 44,621	2,950,548	$ 9,893	2,744,184	$ 5,900	9,629,171	$ 10	$ 1,098	$ (25,277)	$ (24,169)

The accompanying notes are an integral part of these financial statements.

LENZ THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(in thousands)

	Year ended December 31, 2021	2022
Cash flows from operating activities		
Net loss	$ (7,563)	$ (10,811)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2	8
Change in fair value of preferred stock warrants	819	(21)
Share-based compensation expense	196	721
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(16)	(2,112)
Accounts payable	382	4,295
Accrued liabilities	788	3,858
Security deposit	(2)	(29)
Net cash used in operating activities	(5,394)	(4,091)
Cash flows from investing activities		
Purchases of property and equipment	(9)	(37)
Net cash used in investing activities	(9)	(37)
Cash flows from financing activities		
Proceeds from issuance of Series A and Series A-1 convertible preferred stock, net of issuance costs	22,765	30,133
Proceeds from exercises of stock options	—	129
Net cash provided by financing activities	22,765	30,262
Net increase in cash	17,362	26,134
Cash beginning of the year	945	18,307
Cash end of the period	$ 18,307	$ 44,441
Supplemental disclosure of non-cash investing and financing information		
Right-of-use assets obtained in exchange for operating lease liabilities	$ —	$ 311

The accompanying notes are an integral part of these financial statements.

LENZ THERAPEUTICS, INC.

NOTES TO FINANCIAL STATEMENTS

1. Organization and Liquidity

Description of the Business

Lenz Therapeutics, Inc. (Lenz Therapeutics or the Company), previously known as Presbyopia Therapies, Inc., became a corporation in Delaware on October 28, 2020, upon the filing of a Certificate of Conversion to convert Presbyopia Therapies, LLC, a Delaware limited liability company (formed in September 2013) to a Delaware corporation.

Lenz Therapeutics is headquartered in Del Mar, California. The Company is a late-stage clinical company developing innovative ophthalmic pharmaceutical products.

Liquidity

The Company has incurred net losses and negative cash flows from operations since inception and as of December 31, 2022, had an accumulated deficit of $25.3 million. The Company incurred net losses of $7.6 million and $10.8 million during the years ended December 31, 2021 and 2022, respectively. As of December 31, 2022, the Company had cash of $44.4 million, which is available to fund future operations.

The Company expects to incur additional losses in the future as it continues its research and development efforts, advances its product candidates through clinical development, seeks regulatory approval, prepares for commercialization, as well as hires additional personnel, protects its intellectual property and grows its business. The Company will need to raise additional capital to support its continuing operations and pursue its long-term business plan, including to complete the development and commercialization of its product candidates, if approved. Such activities are subject to significant risks and uncertainties, including clinical failure which can impact the Company's ability to secure additional funding. The Company has historically financed its operations primarily with the proceeds from the issuance of its convertible preferred stock and common stock. The Company may raise additional capital through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. However, there is no guarantee that any of these financing or opportunities will be executed or realized on favorable terms, if at all, and some could be dilutive to existing stockholders. The Company's ability to raise additional capital through either the issuance of equity or debt is dependent on a number of factors including, but not limited to, Company prospects, which itself is subject to a number of development and business risks and uncertainties, as well as uncertainty about whether the Company would be able to raise such additional capital at a price or on terms that are favorable.

The Company believes that its existing cash, cash equivalents and marketable securities as of December 31, 2022 will be sufficient to support operations for at least the next 12 months from the date these financial statements were available to be issued.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements were prepared based on the accrual method of accounting in accordance with U.S. generally accepted accounting principles (GAAP). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB).

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant estimates used in preparing the accompanying financial statements include, but are not limited to, estimates related to the research and development accruals, preferred stock warrants liability, share-based compensation, and the valuation of deferred tax assets and liabilities. Although actual results could differ from those estimates, management does not believe that such differences would be material.

Concentration of Credit Risk and other Risks and Uncertainties

Financial instruments, which potentially subject the Company to a concentration of credit risk, consist primarily of cash. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. The Company deposits its cash primarily in a traditional checking and savings accounts with a financial institution and does not have restricted cash.

Fair Value Measurements

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or non-recurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1—Observable inputs such as quoted prices in active markets.

Level 2—Inputs, other than the quoted prices in active markets that are observable either directly or indirectly.

Level 3—Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3 (see Note 3). A financial instrument’s level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value of the instrument.

Property and Equipment, Net

Property and equipment are recorded at cost and depreciated over its estimated useful life using the straight-line method. Upon retirement or disposal, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is recognized within operating expenses. Routine expenditures for maintenance and repairs are expensed as incurred.

Estimated useful lives for property and equipment are as follows:

	Estimated Useful Life
Computer equipment	5 years
Furniture and fixtures	5 years
Lab equipment	5 years

Impairment of Long-Lived Assets

The Company reviews the recoverability of its long-lived asset when events or changes in circumstances occur that indicate that the carrying value of the asset group may not be recoverable. Recoverability of the long-lived asset group is measured by a comparison of the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset group. If these cash flows are less than the carrying value of such asset group, the Company then determines the fair value of the underlying asset group. Any impairment loss to be recognized is measured by the amount by which the carrying amount of the asset group exceeds the estimated fair value of the asset group. There were no impairment losses recognized during the years ended December 31, 2021 or 2022.

Leases

Prior to January 1, 2022, the Company had one cancelable operating lease agreement for its corporate headquarters and recognized related rent expense on a straight-line basis over the term of the lease. The Company began recognizing rent expense on the date that it obtained the legal right to use and control the leased space.

Subsequent to the adoption of the new leasing standard on January 1, 2022, the Company determines if an arrangement is or contains a lease at inception by assessing whether it conveys the right to control the use of an identified asset in exchange for consideration. If a lease is identified, classification is determined at lease commencement. To date, all of the Company's leases have been determined to be operating leases. Operating lease liabilities are recognized at the present value of the future lease payments at the lease commencement date. The Company's leases do not provide an implicit interest rate and therefore the Company estimates its incremental borrowing rate to discount lease payments. The incremental borrowing rate reflects the estimated interest rate that the Company would have to pay to borrow on a collateralized basis, an amount equal to the lease payments in a similar economic environment over a similar term. Operating lease right-of-use (ROU) assets are determined based on the corresponding lease liability adjusted for any lease payments made at or before commencement, initial direct costs, and lease incentives. The operating lease ROU asset also includes impairment charges if the Company determines the ROU asset is impaired. The Company considers a lease term to be the noncancelable period that it has the right to use the underlying asset, including any periods where it is reasonably assured the Company will exercise the option to extend the contract. Periods covered by an option to extend are included in the lease term if the lessor controls the exercise of that option. Operating lease expenses are recognized, and the ROU assets are amortized on a straight-line basis over the lease term. The Company has elected to not separate lease and non-lease components for its leased assets and accounts for all lease and non-lease components of its agreements as a single lease component. The Company has elected not to recognize on the balance sheets leases with terms of one year or less.

Research and Development Expenses and Related Prepaid Assets and Accrued Liabilities

Research and development costs are expensed as incurred. Research and development expenses primarily consist of internal research and development expense, including personnel-related expenses (such as salaries, benefits and noncash stock-based compensation) and external research and development expenses incurred under arrangements with vendors conducting research and development services on its behalf, such as contract research organizations (CROs) and contract manufacturing organizations (CMOs).

Payments made prior to the receipt of goods or services to be used in research and development are capitalized, evaluated for current or long-term classification, and included in prepaid expenses and other current assets or other assets in the balance sheets based on when the goods are received or the services are expected to be received or consumed, and recognized in research and development expenses when they are realized.

The Company is required to estimate expenses resulting from its obligations under contracts with vendors, service providers and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in cash flows that do not match the periods over which materials or services are provided. The Company estimates and records accrued expenses for the related research and development activities based on the level of services performed but not yet invoiced pursuant to agreements established with its service providers, according to the progress of clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and services.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from the Company's estimates. The Company estimates accrued expenses as of each balance sheet date in its financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of CROs, CMOs and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its estimate may vary from the actual results. To date, the Company has not experienced material differences between its accrued expenses and actual expenses.

Preferred Stock Warrants Liability

The Company has freestanding warrants to purchase shares of its Series A convertible preferred stock (Series A Convertible Preferred). Upon certain change in control events that are outside of the Company's control, including liquidation, sale or transfer of control of the Company, holders of Series A Convertible Preferred can cause its redemption. The warrants are revalued at each subsequent balance sheet date utilizing an option pricing method that back solves the fair value of the warrants based on recent financing transactions and also considers the enterprise value of the Company when considering potential exit events. Changes in fair value are recognized as increases or reductions to other income (expense), net in the accompanying statements of operations and comprehensive loss. The fair value of these warrants is classified as a non-current liability in the accompanying balance sheet since the underlying Series A Convertible Preferred stock is potentially redeemable.

Convertible Preferred and Common Stock

The Company's convertible preferred stock and Class B convertible common stock are classified outside of stockholders' deficit because the shares contain deemed liquidation rights that are a contingent redemption feature not solely within the control of the Company.

The carrying values of the convertible preferred stock and Class B convertible common stock are adjusted to their liquidation preferences if and when it becomes probable that such a liquidation event will occur. The Company did not accrete the value of the convertible preferred stock to its redemption value since a liquidation event was not considered probable as of December 31, 2021 and 2022. Subsequent adjustments to the carrying values of the convertible preferred stock will be made only when it becomes probable that such liquidation events will occur, causing the shares to become redeemable.

Share-Based Compensation

The Company maintains an equity incentive plan as a long-term incentive for employees, directors, and non-employee service providers. All share-based payments to employees and directors, including grants of incentive stock options, nonqualified stock options, restricted stock awards, unrestricted stock awards, or

restricted stock units, are recognized as expense based on their grant date fair values. The Company recognizes expense on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. Stock-based compensation is classified in the statements of operations and comprehensive loss based on the function to which the related services are provided. The Company has elected to account for forfeitures as they occur.

Stock Options

The Company estimated the fair value of options granted using the Black-Scholes-Merton (Black-Scholes) option pricing model for stock option grants to both employees and non-employees. The Company will reconsider the use of the Black-Scholes option pricing model if additional information becomes available in the future that indicates another model would be more appropriate or if grants issued in future periods have characteristics that prevent their value from being reasonably estimated using this model.

The Black-Scholes option pricing model requires inputs based on certain subjective assumptions. A discussion of management's methodology for developing the assumptions used in the valuation model follows:

Fair Value of Common Stock—Given the lack of an active public market for the Company's common stock, the fair value of the Company's common stock was determined by the board of directors with input from management and consideration of third-party valuation reports. In the absence of a public trading market, and as a clinical-stage company with no significant revenues, the Company believes that it was appropriate to consider a range of factors to determine the fair market value of the common stock at each grant date. In determining the fair value of its common stock, the Company used methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' (AICPA) Audit and Accounting Practice Aid Series: *Valuation of Privately Held Company Equity Securities Issued as Compensation*. In addition, the Company considered various objective and subjective factors, along with input from the independent third-party valuation firm. The factors included (1) the achievement of clinical and operational milestones by the Company; (2) the significant risks associated with the Company's stage of development; (3) capital market conditions for life science companies, particularly similarly situated, privately held, early-stage life science companies; (4) the Company's available cash, financial condition, and results of operations; (5) the most recent sales of the Company's convertible preferred stock; and (6) the preferential rights of the outstanding convertible preferred stock and Class B convertible common stock.

Expected Dividend Yield—The expected dividend yield is based on the Company's historical and expected dividend payouts. The Company has historically paid no dividends and does not anticipate dividends to be paid in the future.

Expected Equity Volatility—Due to the lack of a public market for the Company's common stock and the lack of company-specific historical and implied volatility data, the Company has based its computation of expected volatility on the historical volatility of a representative group of public companies with similar characteristics to the Company (e.g., public entities of similar size, complexity, stage of development, and industry focus). The historical volatility is calculated based on a period of time commensurate with expected term assumption.

Risk-Free Interest Rate—The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected term of the stock options.

Expected Term—The Company uses the simplified method as prescribed by the Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax base. Deferred tax assets and liabilities are measured using effective tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Deferred tax expense or benefit is the result of changes in the deferred tax assets and liabilities. Valuation allowances are established when necessary to reduce deferred tax assets where, based upon the available evidence, the Company concludes that it is more-likely-than-not that some or all of the deferred tax assets will not be realized. In evaluating its ability to recover deferred tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. Because of the uncertainty of the realization of deferred tax assets, the Company has recorded a valuation allowance against its net deferred tax assets.

Liabilities are provided for tax benefits for which realization is uncertain. Such benefits are only recognized when the underlying tax position is considered more-likely-than-not to be sustained on examination by a taxing authority, assuming they possess full knowledge of the position and facts. Interest and penalties related to uncertain tax positions are recognized in the provision of income taxes. As of December 31, 2021 and 2022, the Company had no interest or penalties related to uncertain income tax benefits.

The Company's policy is to include interest and penalties related to unrecognized income tax benefits as a component of income tax expense. The Company has no accruals for interest or penalties in the balance sheets as of December 31, 2021 and 2022 and has not recognized interest or penalties in the statements of operations for the years ended December 31, 2021 or 2022.

Revenue Recognition

The Company evaluates its revenue agreements in accordance with FASB ASC 606, *Revenue from Contracts with Customers* (ASC 606). ASC 606 requires a five-stage approach, including (i) identification of the contract; (ii) identification of performance obligations; (iii) determination of the transaction price; (iv) allocation of the transaction price; and (v) recognition of revenue.

Net Loss Per Share

Basic net loss per share is calculated by dividing net loss attributed to Class A common stockholders by the weighted-average number of shares of Class A common stock outstanding during the period, without consideration for common stock equivalents. The convertible preferred stock and Class B convertible common stock are not participating securities, because they do not participate in losses. Stock options, preferred stock warrants, Class A warrants, Class B convertible common stock, and convertible preferred stock are considered potentially dilutive Class A common stock. The Company computes diluted net loss per share attributable to Class A common stockholders after giving consideration to all potentially dilutive Class A common stock outstanding during the period, determined using the treasury-stock and if-converted methods, except where the effect of including such securities would be antidilutive. The Company makes adjustments to diluted net loss attributed to Class A common stockholders to reflect the reversal of gains on the change in the value of preferred stock warrants liability, assuming conversion of warrants to acquire convertible preferred stock at the beginning of the period or at time of issuance, if later, to the extent that those preferred stock warrants are dilutive. Diluted net loss per share is the same as basic net loss per share, since the effects of potentially dilutive securities are antidilutive given the net loss for each period presented.

Comprehensive Loss

Comprehensive loss represents the change in the Company's stockholders' deficit from all sources other than investments by or distributions to stockholders. The Company has no items of other comprehensive loss, and as such, net loss is the same as comprehensive loss.

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it is (i) no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Segment Reporting

Operating segments are defined as components of an entity about which separate discrete information is available for evaluation by the chief operating decision maker (CODM), or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's Chief Executive Officer services as the CODM. The CODM views the Company's operations as and manages its business in one operating segment operating exclusively in the United States.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU2016-02, *Leases (Topic 842)*, which requires lessees to recognize a lease liability and a right-of-use asset for each lease with a term longer than twelve months. The Company adopted this standard on January 1, 2022 using the modified retrospective approach and elected the package of practical expedients permitted under transition guidance, which allowed the Company to carry forward its historical assessments of: 1) whether contracts are or contain leases, 2) lease classification and 3) initial direct costs, where applicable. The Company did not elect the practical expedient allowing the use-of-hindsight which would require the Company to reassess the lease term of its leases based on all facts and circumstances through the effective date and did not elect the practical expedient pertaining to land easements as this is not applicable to the current contract portfolio. The Company elected the post-transition practical expedient to not separate lease components from non-lease components for all existing lease classes. The Company also elected a policy of not recording leases on its balance sheets when the leases have a term of twelve months or less and the Company is not reasonably certain to elect an option to purchase the leased asset. The adoption of this standard did not have a material impact on the Company's financial statements.

3. Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, including cash classified within the Level 1 designation, prepaid and other current assets, accounts payable, and accrued liabilities approximate fair value due to their short maturities. The preferred stock warrants liability is recorded at fair value on a recurring basis.

The Company has no financial assets measured at fair value on a recurring basis. None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis.

Liabilities measured at fair value on a recurring basis are as follows (in thousands):

	Fair Value Measurements at Reporting Date			
	Total	Level 1	Level 2	Level 3
At December 31, 2021:				
Liabilities				
Preferred stock warrants liability	$ 1,015	$ —	$ —	$ 1,015
Total liabilities measured at fair value	$ 1,015	$ —	$ —	$ 1,015
At December 31, 2022:				
Liabilities				
Preferred stock warrants liability	$ 994	$ —	$ —	$ 994
Total liabilities measured at fair value	$ 994	$ —	$ —	$ 994

The key unobservable inputs for the preferred stock warrants liability were:

	December 31,	
	2021	2022
Estimated time to liquidity	4.0 years	2.5 years
Volatility rate	103.0%	70.0%
Risk-free interest rate	0.3%	4.3%

The Company did not transfer any assets measured at fair value on a recurring basis between levels during the years ended December 31, 2021 and 2022.

The following table presents activity for the preferred stock warrants liability during the years ended December 31, 2022 (in thousands):

	Preferred Stock Warrants Liability
Balance at December 31, 2021	$ 1,015
Change in fair value	(21)
Balance at December 31, 2022	$ 994

4. Property and Equipment, net

Property and equipment, net consisted of the following (in thousands):

	As of December 31,	
	2021	2022
Office equipment	$ 10	$ 46
Lab equipment	5	5
Property and equipment, gross	15	51
Less accumulated depreciation	(5)	(12)
Property and equipment, net	$ 10	$ 39

Depreciation and amortization expense was $2,000 and $8,000 for the years ended December 31, 2021 and 2022, respectively. As of December 31, 2022, all the Company's property and equipment was located in the United States.

5. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	As of December 31,	
	2021	2022
Accrued research and development expense	$ 292	$ 3,192
Accrued payroll and related benefits	385	875
Income taxes payable	—	347
Operating lease liability, current portion	—	103
Other accrued liabilities	116	227
Total accrued liabilities	$ 793	$ 4,744

6. Commitments and Contingencies

Operating Leases

The Company leased office space in Del Mar, California under a lease that has a term that expired on March 31, 2022. Commencing on April 1, 2022, the Company entered into a lease agreement for office space in Del Mar, California expiring March 31, 2025, unless renewed. As of December 31, 2022, the remaining lease term was 2.3 years, and the discount rate used to determine the right-of-use assets and corresponding operating lease liabilities was 7.0%. Cash paid for operating leases approximated rent expense for the periods presented.

Maturities of operating lease liabilities as of December 31, 2022, are as follows (in thousands):

Undiscounted lease payment	
2023	$120
2024	124
2025	31
Total undiscounted lease payments	275
Less present value adjustment	(25)
Operating lease liabilities	$250

Rent expense for the years ended December 31, 2021 and 2022 was $21,000 and $110,000, respectively.

Contingencies

From time to time, the Company may be subject to various litigation and related matters arising in the ordinary course of business. The Company records a provision for a liability when it believes that it is both probable that a liability has been incurred and the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. As of December 31, 2021 and 2022, the Company was not involved in any material legal proceedings.

Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2022, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

7. Convertible Preferred Stock

As of December 31, 2022, the Company has authorized 25,742,325 shares of preferred stock with a par value of $0.001. As of December 31, 2021, there were 12,077,942 shares of Series A Convertible Preferred Stock (Series A) issued and outstanding. As of December 31, 2022, there were 21,977,282 shares of Series A and 2,950,548 shares of Series A-1 Convertible Preferred Stock (Series A-1) issued and outstanding. As of December 31, 2022, the total liquidation preference of issued and outstanding Series A and Series A-1 was $47.3 million and $10.0 million, or $2.15 per share and $3.3892 per share, respectively.

Dividends

The holders of preferred stock are entitled to receive annual noncumulative dividends at an annual rate of 8% in preference to any declaration or payment of any dividend on the common stock, on an as-converted basis when, as and if declared by the board of directors. As of December 31, 2021 and 2022, no dividends had been declared.

Voting Rights

Each holder of outstanding shares of Series A and Series A-1 shall be entitled to cast the number of votes equal to the number of whole shares of Class A common stock into which the shares of Series A and Series A-1 held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter.

Conversion Rights

Each share of preferred stock is convertible into shares of common stock at the ratio calculated by dividing the original issuance price by the conversion price. The conversion price is equal to the original issuance price but is subject to anti-dilution adjustments for splits, dividends and similar recapitalizations. As of December 31, 2022, the conversion ratio was one-for-one.

Subject to certain exclusions, anti-dilution price protection for additional sales of securities by the Company for consideration per unit less than the applicable conversion price per unit of any series of preferred stock are to be on a broad-based weighted average basis.

Liquidation Preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of Series A and Series A-1 shall be entitled to be paid out of the assets of the Corporation available for distribution to its shareholders before any payment shall be made to the holders of the Class A and Class B convertible common stock.

The Company did not adjust the carrying values of the preferred stock to the liquidation preferences of such shares because it was uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of Class B convertible common stock and preferred stock and these circumstances were not probable as of the balance sheet dates. Subsequent adjustments to the carrying values of the liquidation preferences are to be made only when it becomes probable that such a liquidation event will occur.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of shares of the Company then outstanding preferred and common stock shall be entitled to be paid as follows:

- First to the holders of shares of preferred stock then outstanding, an amount per share equal to the sum of original issue price plus any dividends declared but unpaid thereon.
- Second, to the holders of shares of Class B convertible common stock then outstanding, an amount per share equal to the original issue price for the Class B convertible common stock, plus any dividends

declared but unpaid thereon, plus an additional per share amount calculated at a rate per annum equal to 10% of the original $2.15 issue price for the Class B convertible common stock, compounded annually, and which shall be calculated from the Class B convertible common stock original issue date until the earlier to occur of (i) as applicable, the date of the deemed liquidation event or (ii) the fifth anniversary of such Class B convertible common stock original issue date. As of December 31, 2022, the liquidation preference was $9.5 million, or $3.46 per share.

- Then, among the holders of the shares of preferred stock, Class B convertible common stock, and Class A common stock, principally pro rata based on the number of shares held by each such holder as if they had been converted to Class A common stock immediately prior to such liquidation, dissolution or winding up of the Corporation.

Registration Rights

Under the Company's investors' rights agreement, the holders of a majority of Company's stock outstanding have the right to demand that the Company file a registration statement or request that their shares be covered by a registration statement that the Company is otherwise filing. The obligations of the Company regarding such registration rights include, but are not limited to, commercially reasonable efforts to cause such registration statement to become effective, keep such registration statement effective for up to 120 days, prepare and file amendments and supplements to such registration statement and the prospectus used in connection with such registration statement, and furnish to the selling holders copies of the prospectus and any other documents as they may reasonably request. The terms of the registration rights provide for the payment of certain expenses related to the registration of the shares, including a capped reimbursement of legal fees of a single special counsel for the holders of the shares, but do not impose any obligations for the Company to pay additional consideration to the holders in case a registration statement is subsequently withdrawn at the request of the holders.

8. Common Stock

As of December 31, 2022, the Company has authorized three series of common stock, designated Class A common stock, Class B convertible common stock and Class C common stock. As of December 31, 2021 and 2022, there were 9,357,145 and 9,915,013 of Class A common stock issued, respectively, and there were 9,357,145 and 9,629,171 Class A common stock outstanding, respectively. As of December 31, 2021 and 2022, there were 2,744,184 shares of Class B convertible common stock issued and outstanding. As of December 31, 2021 and 2022, there were no shares of Class C common stock issued or outstanding.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Class B convertible common stockholders are entitled to receive noncumulative dividends at an annual rate of 8%, as may be declared by the board of directors, if any. Class A and Class C common stockholders have no dividend rights. Such dividends are not cumulative, and no dividends have been declared or paid by the Company through December 31, 2022.

Class A common stock reserved for future issuance consist of the following:

	As of December 31,	
	2021	2022
Convertible preferred stock	12,077,942	24,927,830
Class B convertible common stock	2,744,184	2,744,184
Class A common stock options granted and outstanding	4,383,551	5,271,961
Class A shares available for issuance under incentive plans	713,782	115,306
Class A common stock warrants	470,000	470,000
Preferred stock warrants	814,495	814,495

9. Warrants

The Company has issued warrants to acquire Class A common stock and Series A convertible preferred stock.

The warrant to purchase Class A common stock has an exercise price of $0.21 per share and was issued in December 2020 with an expiration date in February 2024.

The Series A preferred stock warrants have an exercise price of $2.15 per share and were issued in October 2020 with an expiration date in October 2027. The Series A preferred stock warrants shall no longer be exercisable and become null and void on the date of which the Company consummates the sale of its common stock or other securities in the Company's first underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, or in the event of a deemed liquidation event, provided however that if the holder of any such Series A preferred stock warrant has not exercised the warrant prior to the closing of any such transaction, such Series A preferred stock warrant shall automatically be deemed to be exercised in full pursuant to the net exercise features of such Series A preferred stock warrants immediately prior to the closing of the applicable transaction, without any further action required on the part of the holder thereof.

No warrants were exercised for any of the periods presented.

10. Share-Based Compensation

The Company's 2020 Equity Incentive Plan (the 2020 Plan) provides for the grant of incentive stock options, non-statutory stock options, and other equity awards to the Company's employees, officers, directors, and consultants. As of December 31, 2022, the aggregate number of shares of Class A common stock available for issuance pursuant to awards under the 2020 Plan, as amended, was 5,945,132 shares.

Stock Options

Stock options granted under the 2020 Equity Incentive Plan generally vest over three or four years and expire after 10 years.

The per share exercise price for stock options granted is set at the fair value per share of common stock as determined by the board of directors as of the date of grant. The board of directors determined the value the Company's Class A common stock considering many factors, including third-party valuation of the Company's Class A common shares, as well as additional factors, which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

A summary of stock option activity for awards under the 2020 Plan is presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Lives (years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2021	4,383,551	$ 0.26	6.9	$ 486
Granted	1,446,275	$ 0.82	10.0	
Exercised	(557,865)	$ 0.60	—	
Outstanding as of December 31, 2022	5,271,961	$ 0.38	6.8	$ 3,898
Exercisable as of December 31, 2022	4,928,841	$ 0.36	6.7	$ 3,739
Vested and expected to vest	5,557,800	$ 0.39	7.0	$ 4,021

The weighted average grant date fair value per share of stock options granted during the years ended December 31, 2021 and 2022 was $0.39 and $0.73, respectively.

The Company recorded share-based compensation expense of $0.2 million and $0.7 million for the years ended December 31, 2021 and 2022, respectively. As of December 31, 2022, there was $1.3 million of unrecognized compensation cost related to unvested share-based compensation arrangements granted under the 2020 Plan, which is expected to be recognized over a weighted average period of 2.4 years.

Share-based compensation expense was as follows (in thousands):

	Year Ended December 31,	
	2021	2022
Selling, general and administrative	$ 186	$ 568
Research and development	10	153
Total	$ 196	$ 721

The assumptions used in the Black-Scholes option pricing model for stock options granted were as follows:

	December 31,	
	2021	2022
Expected term	6.0 years	6.0 years
Expected volatility	93.0% - 105.0%	92.8% - 96.6%
Risk free interest rate	0.2% - 1.3%	1.9% - 4.2%
Expected dividend yield	0.0%	0.0%

Liability for Early Exercise of Stock Options

Certain individuals were granted the ability to early exercise their stock options. The shares of Class A common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the accompanying balance sheets and will be transferred into Class A common stock and additional paid-in capital as the shares vest. As of December 31, 2021 and 2022, zero and 285,839 unvested shares issued under early exercise provisions were subject to repurchase by the Company, respectively. As of December 31, 2021 and 2022, the Company recorded zero and $0.1 million, respectively, associated with early exercised stock options in other long-term liabilities.

11. Net Loss Per Share Attributable to Class A Common Stockholders

The Company's potential dilutive securities, which include convertible preferred stock, options to purchase common stock, Class A common warrants, preferred stock warrants, and Class B convertible common stock, have been excluded from the computation of diluted net loss per share as the effect would be anti-dilutive. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at period end, from the computation of diluted

net loss per share attributable to common stockholders for the period indicated because including them would have had an anti-dilutive effect:

	December 31,	
	2021	2022
Convertible preferred stock	12,077,942	24,927,830
Class A common stock options granted and outstanding	4,383,551	5,271,961
Class A common stock warrants	470,000	470,000
Preferred stock warrants	814,495	814,495
Class B convertible common stock	2,744,184	2,744,184
Total	20,490,172	34,228,470

The holders of convertible preferred stock and Class B convertible common stock do not contractually share in losses and therefore no additional net loss per share has been disclosed under the two-class method.

12. Income Taxes

The components of the provision for income taxes were as follows (in thousands):

	Year Ended December 31,	
	2021	2022
Current		
Federal	$ —	$ 322
State	—	25
Total current	—	347
Deferred		
Federal	—	—
State	—	—
Total deferred	—	—
Total income tax expense	$ —	$ 347

A reconciliation of the Company's income tax expense (benefit) to the amount computed by applying the federal statutory income tax rate is summarized as follows (in thousands):

	Year Ended December 31,	
	2021	2022
Expected tax benefit computed at federal statutory rate	$ (1,588)	$ (2,192)
State income taxes, net of federal tax benefit	(528)	(2)
Permanent differences	28	70
Research and development credit carryforwards	—	(1,788)
Reserve for uncertain tax positions	—	140
Other	229	203
Change in valuation allowance	1,859	3,916
Income tax expense	$ —	$ 347

Significant components of the Company's net deferred tax assets (liabilities) are summarized as follows (in thousands):

	Year Ended December 31,	
	2021	2022
Deferred tax assets		
Net operating loss carryforwards	$ 746	$ 152
Research and development credit carryforwards	—	982
Capitalized research and development	1,658	5,044
Intangible assets	360	249
Share-based compensation	43	137
Other	—	220
Total deferred tax assets	2,807	6,784
Valuation allowance	(2,807)	(6,727)
Net deferred tax assets	—	57
Deferred tax liabilities		
Other	—	(57)
Total deferred tax liabilities	—	(57)
Net deferred tax assets	$ —	$ —

The Tax Cuts and Jobs Act (TCJA) requires taxpayers to capitalize and amortize research and development (R&D) expenditures under section 174 for tax years beginning after December 31, 2021. This rule became effective for the Company during the year ended December 31, 2022 and resulted in capitalization of R&D costs of approximately $20.0 million. The Company will amortize these costs for tax purposes over 5 years for R&D performed in the U.S. and over 15 years for R&D performed outside the U.S.

Deferred income tax assets and liabilities are recorded for differences between the financial statement and tax basis of the assets and liabilities that will result in taxable or deductible amounts in the future based on enacted laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company evaluated the available evidence supporting the realization of its gross deferred tax assets, including the amount and timing of future taxable income, and has determined it is more likely than not that the assets will not be realized. Due to uncertainties surrounding the realizability of the deferred tax assets, the Company maintains a full valuation allowance against its deferred tax assets at December 31, 2021 and 2022.

At December 31, 2022, the Company had no federal net operating loss (NOL) carryforwards and $2.2 million in state NOL carryforwards. State NOLs totaling $2.2 million begin to expire in 2040, unless previously utilized. In addition, the Company also has federal and state R&D credit carryforwards totaling $0.8 million and $0.4 million, respectively. The federal R&D credit carryforwards will begin to expire in 2042 unless previously utilized. The state R&D credit carryforwards will begin to expire in 2037 unless previously utilized.

Utilization of NOL carryforwards may be subject to substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended, due to ownership change limitations that have occurred previously or that could occur in the future. An ownership change occurs, generally, if the percentage of stock of the loss corporation owned by one or more 5% shareholders has increased by more than 50 percentage points relative to the lowest percentage of stock of the loss corporation owned by the same 5% shareholders at any time during the testing period (generally, the three-year period preceding a testing date). These ownership changes may limit the

amount of NOL carryforwards and tax credits that can be utilized annually to offset future taxable income. During 2022, the Company conducted a Section 382 study, and it was determined that the Company underwent an ownership change as defined under Section 382 in April 2021. It was determined that based upon the calculations, no attribute carryovers will expire without utilization as a result of Section 382 limitations.

The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination by tax authorities. The Company does not expect that there will be a significant change in the unrecognized tax benefits over the next twelve months. Further, due to the existence of the valuation allowance, further changes in the Company's unrecognized tax benefit will not impact the effective tax rate.

The following table summarizes the changes to the Company's gross unrecognized tax benefits (in thousands):

	Year Ended December 31,	
	2021	2022
Balance at beginning of year	$ —	$ —
Increases related to prior year tax positions	—	28
Increases related to current year tax positions	—	103
Balance at end of year	—	131

As of December 31, 2021 and 2022, the Company had unrecognized tax benefits of zero and $0.1 million, respectively, which if recognized currently, should not impact the effective tax rate due to the Company maintaining a full valuation allowance. The Company does not expect that there will be a significant change in the unrecognized tax benefit over the next twelve months.

The Company is subject to taxation in the US. federal and various state jurisdictions. All of the Company's tax years are subject to examination by federal and state tax authorities due to the carryforward of unutilized NOLs and R&D credits. Further the Company is not currently under examination by any federal, state or local tax authority.

13. License Agreements

In April 2022, the Company entered into a license and collaboration agreement providing an exclusive license (License) to certain of the Company's intellectual property (IP) for use in the treatment of presbyopia in humans in the People's Republic of China. The Company also agreed to negotiate a separate agreement for the purchase of clinical and commercial supply of IP for clinical and commercial requirements at cost plus a negotiated percentage and granted a right of first negotiation to obtain a China regional license on other products the Company might develop.

The Company received nonrefundable, non-creditable upfront payments totaling $15.0 million as initial consideration under the License, which represents the transaction price at inception. In addition, the Company is also eligible to receive up to $95.0 million of regulatory and sales milestones, as well as tiered low double-digit royalties on net sales of IP in the Peoples Republic of China. Additional consideration to be paid to the Company upon reaching regulatory and sales milestones is excluded from the transaction price. Future milestone payments are fully contingent as the risk of significant revenue reversal will only be resolved depending on future regulatory approval and sales level outcomes. The sales-based royalty fee qualifies for the royalty constraint exception and does not require an estimate of the future transaction price. The sales-based royalty fee is considered variable consideration and will be recognized as revenue as such sales occur, if any.

The Company assessed the promises made under the License and concluded the License comprises a single performance obligation providing the right to use functional intellectual property. The $15.0 million transaction

price allocated to that single performance obligation was recognized on completion of the transfer of the License in the year ended December 31, 2022. No additional amounts under the License were paid during the year ended December 31, 2022 or were due to the Company at December 31, 2022.

Contemporaneously with entering into the License agreement, a significant investor in the licensee purchased 2,950,548 shares of the Company's Series A-1 Preferred Stock for $10.0 million.

14. Employee Benefit Plan

The Company sponsors a 401(k) retirement plan to provide retirement benefits for all eligible employees. Participating employees may voluntarily contribute up to limits provided by Internal Revenue Service regulations. For the years ended December 31 2021 and 2022, the Company made contributions to the plan of $22,000 and $58,000, respectively.

15. Related Party Transactions

In April 2021, the Company issued 10,898,334 shares of its Series A preferred stock for total cash proceeds of $23.4 million to significant shareholders that have designated members on the Company's board of directors and are considered to be related parties and to a trust affiliated with an additional member of the Company's board of directors.

In October 2022, the Company issued 9,899,340 shares of its Series A preferred stock for total cash proceeds of $21.3 million to significant shareholders that have designated members on the Company's board of directors and are considered to be related parties.

16. Subsequent Events

The Company has evaluated subsequent events through September 6, 2023, the date on which the accompanying financial statements are available to be issued.

On March 6, 2023, the Company issued 28,019,181 shares of Series B preferred stock in exchange for cash proceeds of approximately $83.5 million. On March 3, 2023, the Company also cancelled its Class C common stock pursuant to its amended and restated certificate of incorporation filed in connection with the Series B preferred stock financing.

In June 2023, the Company's board of directors granted options to purchase a total of 3,839,376 shares of Class A common stock to management, certain employees, a board director, and a consultant, each at an exercise price of $1.22 per share.

LENZ THERAPEUTICS, INC.
CONDENSED BALANCE SHEETS
(in thousands, except for shares and par value)

	December 31, 2022	September 30, 2023 (unaudited)
Assets		
Current assets:		
Cash and cash equivalents	$ 44,441	$ 42,848
Marketable securities	—	45,305
Prepaid expenses and other current assets	2,200	1,726
Total current assets	46,641	89,879
Property and equipment, net	39	58
Operating lease right-of-use asset	240	351
Deferred offering costs	—	1,866
Security deposit	31	21
Total assets	$ 46,951	$ 92,175
Liabilities, convertible preferred and common stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 4,755	$ 5,148
Accrued liabilities	4,744	11,698
Total current liabilities	9,499	16,846
Operating lease liability, net	147	227
Other noncurrent liabilities	66	140
Preferred stock warrants liability	994	1,140
Total liabilities	10,706	18,353
Commitments and contingencies (Note 5)		
Convertible preferred and common stock:		
Series A convertible preferred stock, par value of $0.001 per share; 22,791,777 shares authorized, 21,977,282 shares issued and outstanding as of December 31, 2022 and September 30, 2023	44,621	44,621
Series A-1 convertible preferred stock, par value of $0.001 per share; 2,950,548 shares authorized, and 2,950,548 issued and outstanding at December 31, 2022 and September 30 2023	9,893	9,893
Series B convertible preferred stock, par value of $0.001 per share; 28,019,181 shares authorized, and no shares and 28,019,181 issued and outstanding at December 31, 2022 and September 30 2023, respectively	—	82,976
Class B convertible common stock, par value of $0.001 per share; 2,744,184 shares authorized, and 2,744,184 shares issued and outstanding at December 31, 2022 and September 30, 2023	5,900	5,900
Total convertible preferred and common stock	60,414	143,390
Stockholders' deficit:		
Common stock, par value of $0.001 per share; 79,218,247 Class A shares authorized, and 9,915,013 shares issued at December 31, 2022 and September 30, 2023, respectively, and 9,629,171 and 9,712,156 shares outstanding at December 31, 2022 and September 30, 2023, respectively	10	10
Additional paid-in capital	1,098	1,980
Accumulated deficit	(25,277)	(71,553)
Accumulated other comprehensive loss	—	(5)
Total stockholders' deficit	(24,169)	(69,568)
Total liabilities, convertible preferred and common stock and stockholders' deficit	$ 46,951	$ 92,175

The accompanying notes are an integral part of these condensed financial statements.

LENZ THERAPEUTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(unaudited)
(in thousands, except share and per share data)

	Nine months ended September 30,	
	2022	2023
Revenue:		
License revenue	$ 15,000	$ —
Total revenue	15,000	—
Operating expenses:		
Research and development	13,495	39,968
Selling, general and administrative	2,861	7,472
Total operating expenses	16,356	47,440
Loss from operations	(1,356)	(47,440)
Other income, net	18	1,164
Net loss before income taxes	(1,338)	(46,276)
Provision for income taxes	44	—
Net loss	(1,382)	(46,276)
Other comprehensive loss:		
Unrealized loss on marketable securities	—	(5)
Comprehensive loss	$ (1,382)	$ (46,281)
Net loss per share attributable to Class A common stockholders, basic and diluted	$ (0.15)	$ (4.78)
Weighted-average Class A common shares outstanding, basic and diluted	9,425,336	9,675,142

The accompanying notes are an integral part of these condensed financial statements.

LENZ THERAPEUTICS, INC.
CONDENSED STATEMENTS OF CONVERTIBLE PREFERRED AND COMMON STOCK AND STOCKHOLDERS' DEFICIT
(unaudited)
(in thousands, except share data)

	Convertible Preferred and Common Stock								Stockholders' Deficit					
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Class B Convertible Common Stock		Class A Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensiave Gain/Loss	Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2021	12,077,942	$24,381	—	$ —	—	$ —	2,744,184	$ 5,900	9,357,145	$ 1	$ 251	$ (14,466)	$ —	$ (14,214)
Issuance of Series A-1 convertible preferred stock, net of issuance costs	—	—	2,950,548	9,893	—	—	—	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	—	—	—	—	—	121,309	—	41	—	—	41
Share-based compensation	—	—	—	—	—	—	—	—	—	—	344	—	—	344
Net loss	—	—	—	—	—	—	—	—	—	—	—	(1,382)	—	(1,382)
Balance as of September 30, 2022	12,077,942	$24,381	2,950,548	$ 9,893	—	$ —	2,744,184	$ 5,900	9,478,454	$ 1	$ 636	$ (15,848)	$ —	$ (15,211)

	Convertible Preferred and Common Stock								Stockholders' Deficit					
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Class B Convertible Common Stock		Class A Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensiave Gain/Loss	Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2022	21,977,282	44,621	2,950,548	9,893	—	—	2,744,184	5,900	9,629,171	10	1,098	(25,277)	—	(24,169)
Issuance of Series B convertible preferred stock, net of issuance costs	—	—	—	—	28,019,181	82,976	—	—	—	—	—	—	—	—
Unrealized gain/loss on marketable securities	—	—	—	—	—	—	—	—	—	—	—	—	(5)	(5)
Exercise of stock options	—	—	—	—	—	—	—	—	82,985	—	57	—	—	57
Share-based compensation	—	—	—	—	—	—	—	—	—	—	825	—	—	825
Net loss	—	—	—	—	—	—	—	—	—	—	—	(46,276)	—	(46,276)
Balance as of September 30, 2023	21,977,282	$44,621	2,950,548	$ 9,893	28,019,181	$82,976	2,744,184	$ 5,900	9,712,156	$ 10	$ 1,980	$ (71,553)	$ (5)	$ (69,568)

The accompanying notes are an integral part of these condensed financial statements.

LENZ THERAPEUTICS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

	Nine months ended September 30	
	2022	2023
Cash flows from operating activities		
Net loss	$ (1,382)	$ (46,276)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	5	11
Amortization of premiums and discounts on marketable securities	—	(546)
Change in fair value of preferred stock warrants	(16)	146
Share-based compensation expense	344	825
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(893)	485
Accounts payable	686	(232)
Accrued liabilities	4,657	6,167
Security deposit	(29)	10
Net cash provided by (used in) operating activities	3,372	(39,410)
Cash flows from investing activities		
Purchases of marketable securities	—	(46,264)
Proceeds from maturities of marketable securities	—	1,500
Purchases of property and equipment	(34)	(30)
Net cash used in investing activities	(34)	(44,794)
Cash flows from financing activities		
Proceeds from issuance of Series A-1 and Series B convertible preferred stock, net of issuance costs	9,893	82,976
Deferred offering costs	—	(568)
Proceeds from exercises of stock options	114	203
Net cash provided by financing activities	10,007	82,611
Net increase (decrease) in cash	13,345	(1,593)
Cash and cash equivalents, beginning of the year	18,307	44,441
Cash and cash equivalents, end of the period	$ 31,652	$ 42,848
Supplemental disclosure of non-cash investing and financing information		
Right-of-use assets obtained in exchange for operating lease liabilities	$ 311	$ 190
Deferred offering costs included in accounts payable and accrued expenses	$ —	$ 1,298

The accompanying notes are an integral part of these condensed financial statements.

LENZ THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(unaudited)

1. Organization and Liquidity

Description of the Business

Lenz Therapeutics, Inc. (Lenz Therapeutics or the Company), previously known as Presbyopia Therapies, Inc., became a corporation in Delaware on October 28, 2020, upon the filing of a Certificate of Conversion to convert Presbyopia Therapies, LLC, a Delaware limited liability company (formed in September 2013) to a Delaware corporation.

Lenz Therapeutics is headquartered in Del Mar, California. The Company is a late-stage clinical company developing innovative ophthalmic pharmaceutical products.

Liquidity

The Company has incurred net losses and negative cash flows from operations since inception and as of September 30, 2023, had an accumulated deficit of $71.6 million. The Company incurred net losses of $1.4 million and $46.3 million during the nine months ended September 30, 2022 and 2023, respectively. As of September 30, 2023, the Company had cash, cash equivalents, and marketable securities of $88.2 million, which is available to fund future operations.

The Company expects to incur additional losses in the future as it continues its research and development efforts, advances its product candidates through clinical development, seeks regulatory approval, prepares for commercialization, as well as hires additional personnel, protects its intellectual property and grows its business. The Company will need to raise additional capital to support its continuing operations and pursue its long-term business plan, including to complete the development and commercialization of its product candidates, if approved. Such activities are subject to significant risks and uncertainties, including clinical failure which can impact the Company's ability to secure additional funding. The Company has historically financed its operations primarily with the proceeds from the issuance of its convertible preferred stock and common stock. The Company may raise additional capital through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. However, there is no guarantee that any of these financing or opportunities will be executed or realized on favorable terms, if at all, and some could be dilutive to existing stockholders. The Company's ability to raise additional capital through either the issuance of equity or debt is dependent on a number of factors including, but not limited to, Company prospects, which itself is subject to a number of development and business risks and uncertainties, as well as uncertainty about whether the Company would be able to raise such additional capital at a price or on terms that are favorable.

The Company believes that its existing cash, cash equivalents and marketable securities as of September 30, 2023 will be sufficient to support operations for at least the next 12 months from the date these condensed financial statements were available to be issued.

2. Summary of Significant Accounting Policies

Unaudited Interim Financial Information

The accompanying interim unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles (U.S. GAAP) and follow the requirements of the U.S. Securities and Exchange Commission (SEC) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. GAAP can be

condensed or omitted. In our opinion, the unaudited interim financial statements have been prepared on the same basis as the audited financial statements and include all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of our financial position and our results of operations and cash flows for periods presented. These statements do not include all disclosures required by U.S. GAAP and should be read in conjunction with our financial statements and accompanying notes for the fiscal year ended December 31, 2022 included elsewhere in this prospectus. The results of the interim periods are not necessarily indicative of the results expected for the full fiscal year or any other interim period or any future year or period.

There have been no material changes to the significant accounting policies disclosed in the Company's audited financial statements included elsewhere in this prospectus during the nine months ended September 30, 2023, with the exception of marketable securities, allowance of credit losses, and deferred offering costs as disclosed below.

Marketable Securities

The Company classifies marketable securities as available-for-sale, as the sale of such investments may be required prior to maturity to implement management strategies, and therefore has classified all marketable securities with maturity dates beyond three months at the date of purchase as current assets in the accompanying balance sheets. As of December 31, 2022 and September 30, 2023, the Company had no intent to sell any marketable securities prior to maturity. Marketable securities classified as available-for-sale are carried at fair value with the unrealized gains and losses included in other comprehensive loss as a component of stockholders' deficit until realized. Any premium or discount arising at purchase is amortized and/or accreted to interest income as an adjustment to yield using the straight-line method over the life of the instrument. Realized gains and losses are calculated using the specific identification method and recorded as interest income or expense.

Allowance of Credit Losses

For available-for-sale securities in an unrealized loss position, we first assess whether we intend to sell, or if it is more likely than not that we will be required to sell, the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through earnings. For available-for-sale securities that do not meet the aforementioned criteria, we evaluate whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, we consider the severity of the impairment, any changes in interest rates, market conditions, changes to the underlying credit ratings and forecasted recovery, among other factors. The credit-related portion of unrealized losses, and any subsequent improvements, are recorded in interest income through an allowance account. Any impairment that has not been recorded through an allowance for credit losses is included in other comprehensive income (loss) on the unaudited condensed statements of operations and comprehensive loss.

We elected the practical expedient to exclude the applicable accrued interest from both the fair value and amortized costs basis of our available-for-sale securities for purposes of identifying and measuring an impairment. Accrued interest receivable on available-for-sale securities is recorded within prepaid expenses and other current assets on our unaudited condensed consolidated balance sheets. Our accounting policy is to not measure an allowance for credit loss for accrued interest receivable and to write-off any uncollectible accrued interest receivable as a reversal of interest income in a timely manner, which we consider to be in the period in which we determine the accrued interest will not be collected by us.

Deferred Offering Costs

The Company deferred certain legal, professional accounting and other third-party fees that were directly associated with the Company's planned initial public offering (IPO) as deferred offering costs. Upon consummation of the IPO, these costs will be reclassified to shareholders' deficit as a reduction of the offering proceeds. Should the Company abandon its IPO, these costs will be recorded as operating expenses.

3. Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, including cash and cash equivalents classified within the Level 1 designation, prepaid and other current assets, accounts payable, and accrued liabilities approximate fair value due to their short maturities. The cash equivalents, marketable securities, and preferred stock warrants liability are recorded at fair value on a recurring basis.

None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis.

Assets and liabilities measured at fair value on a recurring basis are as follows (in thousands):

	Fair Value Measurements at Reporting Date			
	Total	Level 1	Level 2	Level 3
At December 31, 2022:				
Liabilities				
Preferred stock warrants liability	$994	$ —	$ —	$ 994
Total liabilities measured at fair value	$994	$ —	$ —	$ 994

	Fair Value Measurements at Reporting Date			
	Total	Level 1	Level 2	Level 3
At September 30, 2023:				
Cash equivalents				
Money market funds	$13,601	$13,601	$ —	$ —
Total cash equivalents measured at fair value	$13,601	$13,601	$ —	$ —
Marketable securities				
Commercial paper	$26,074	$ —	$26,074	$ —
US government agencies	17,269	—	17,269	—
US treasury securities	1,962	1,962	—	—
Total marketable securities measured at fair value	$45,305	$ 1,962	$43,343	$ —
Liabilities				
Preferred stock warrants liability	$ 1,140	$ —	$ —	$1,140
Total liabilities measured at fair value	$ 1,140	$ —	$ —	$1,140

Marketable securities consisted of the following (in thousands):

	September 30, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	$ 26,082	$ 2	$ (10)	$ 26,074
US government agencies	17,264	6	(1)	17,269
US treasury securities	1,964	—	(2)	1,962
Totals	$ 45,310	$ 8	$ (13)	$ 45,305

As of September 30, 2023, 14 of our marketable securities with a fair market value of $22.6 million were in a gross unrealized loss position of $13,000, all of which have been in a gross unrealized loss position for less than one year. When evaluating an investment for impairment, we review factors such as the severity of the impairment, changes in underlying credit ratings, forecasted recovery, our intent to sell or the likelihood that we

would be required to sell the investment before its anticipated recovery in market value and the probability that the scheduled cash payments will continue to be made. Based on our review of these marketable securities, we believe none of the unrealized loss is as a result of a credit loss as of September 30, 2023, because we do not intend to sell these securities, and it is not more-likely-than-not that we will be required to sell these securities before the recovery of their amortized cost basis.

As of September 30, 2023, all marketable securities had contractual maturities of less than one year.

The key unobservable inputs for the preferred stock warrants liability were:

	December 31, 2022	September 30, 2023
Estimated time to liquidity	2.5 years	1.9 years
Volatility rate	70.0%	87.0%
Risk-free interest rate	4.3%	5.0%

The Company did not transfer any assets measured at fair value on a recurring basis between levels during the nine months ended September 30, 2022 and 2023.

The following table presents activity for the preferred stock warrants liability during the years ended December 31, 2022 (in thousands):

	Preferred Stock Warrants Liability
Balance at December 31, 2022	$ 994
Change in fair value	146
Balance at September 30, 2023	$ 1,140

4. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31, 2022	September 30, 2023
Accrued research and development expense	$ 3,192	$ 9,134
Accrued payroll and related benefits	875	1,173
Income taxes payable	347	45
Operating lease liability, current portion	103	133
Other accrued liabilities	227	1,213
Total accrued liabilities	$ 4,744	$ 11,698

5. Commitments and Contingencies

Operating Leases

The Company leased office space in Del Mar, California under a lease that had a term that expired on March 31, 2022. Commencing on April 1, 2022, the Company entered into a lease agreement for office space in Del Mar, California, which was subsequently amended to expand the office space leased and extend the term. As of September 30, 2023, the remaining lease term was 2.5 years, and the discount rate used to determine the right-of-use assets and corresponding operating lease liabilities was 7.0%. Cash paid for operating leases approximated rent expense for the periods presented.

Maturities of operating lease liabilities as of September 30, 2023, are as follows (in thousands):

Undiscounted lease payment	
2023 (remainder of year)	$ 38
2024	155
2025	161
2026	41
Total undiscounted lease payments	395
Less present value adjustment	(35)
Operating lease liabilities	$360

Rent expense for the nine months ended September 30 2022 and 2023 was $81,000 and $106,000, respectively.

Contingencies

From time to time, the Company may be subject to various litigation and related matters arising in the ordinary course of business. The Company records a provision for a liability when it believes that it is both probable that a liability has been incurred and the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. As of December 31, 2022 and September 30, 2023, the Company was not involved in any material legal proceedings.

Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of September 30, 2023, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

6. Convertible Preferred Stock

As of September 30, 2023, the Company has authorized 53,761,506 shares of preferred stock with a par value of $0.001. As of December 31, 2022, there were 21,977,282 shares of Series A Convertible Preferred Stock (Series A) and 2,950,548 shares of Series A-1 Convertible Preferred Stock (Series A-1) issued and outstanding. As of September 30, 2023, there were 21,977,282 shares of Series A, 2,950,548 shares of Series A-1, and 28,019,181 shares of Series B Convertible Preferred Stock (Series B) issued and outstanding. As of September 30, 2023, the total liquidation preference of issued and outstanding Series A, Series A-1, and Series B was $47.3 million, $10.0 million, and $83.5 million, or $2.15 per share, $3.3892 per share, and $2.9801 per share, respectively.

Dividends

The holders of preferred stock are entitled to receive annual noncumulative dividends at an annual rate of 8% in preference to any declaration or payment of any dividend on the common stock, on an as-converted basis when, as and if declared by the board of directors. As of December 31, 2022 and September 30, 2023, no dividends had been declared.

Voting Rights

Each holder of outstanding shares of Series A, Series A-1 and Series B shall be entitled to cast the number of votes equal to the number of whole shares of Class A common stock into which the shares of Series A, Series A-1, and Series B held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter.

Conversion Rights

Each share of preferred stock is convertible into shares of common stock at the ratio calculated by dividing the original issuance price by the conversion price. The conversion price is equal to the original issuance price but is subject to anti-dilution adjustments for splits, dividends and similar recapitalizations. As of September 30, 2023, the conversion ratio was one-for-one.

Subject to certain exclusions, anti-dilution price protection for additional sales of securities by the Company for consideration per unit less than the applicable conversion price per unit of any series of preferred stock are to be on a broad-based weighted average basis.

Liquidation Preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of Series A, Series A-1, and Series B shall be entitled to be paid out of the assets of the Corporation available for distribution to its shareholders before any payment shall be made to the holders of the Class A and Class B convertible common stock.

The Company did not adjust the carrying values of the preferred stock to the liquidation preferences of such shares because it was uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of Class B convertible common stock and preferred stock and these circumstances were not probable as of the balance sheet dates. Subsequent adjustments to the carrying values of the liquidation preferences are to be made only when it becomes probable that such a liquidation event will occur.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of shares of the Company then outstanding preferred and common stock shall be entitled to be paid as follows:

- First to the holders of shares of preferred stock then outstanding, an amount per share equal to the sum of original issue price plus any dividends declared but unpaid thereon.
- Second, to the holders of shares of Class B convertible common stock then outstanding, an amount per share equal to the original issue price for the Class B convertible common stock, plus any dividends declared but unpaid thereon, plus an additional per share amount calculated at a rate per annum equal to 10% of the original $2.15 issue price for the Class B convertible common stock, compounded annually, and which shall be calculated from the Class B convertible common stock original issue date until the earlier to occur of (i) as applicable, the date of the deemed liquidation event or (ii) the fifth anniversary of such Class B convertible common stock original issue date. As of September 30, 2023, the liquidation preference was $9.5 million, or $3.46 per share.
- Then, among the holders of the shares of preferred stock, Class B convertible common stock, and Class A common stock, principally pro rata based on the number of shares held by each such holder as if they had been converted to Class A common stock immediately prior to such liquidation, dissolution or winding up of the Corporation.

Registration Rights

Under the Company's investors' rights agreement, the holders of a majority of Company's stock outstanding have the right to demand that the Company file a registration statement or request that their shares be covered by

a registration statement that the Company is otherwise filing. The obligations of the Company regarding such registration rights include, but are not limited to, commercially reasonable efforts to cause such registration statement to become effective, keep such registration statement effective for up to 120 days, prepare and file amendments and supplements to such registration statement and the prospectus used in connection with such registration statement, and furnish to the selling holders copies of the prospectus and any other documents as they may reasonably request. The terms of the registration rights provide for the payment of certain expenses related to the registration of the shares, including a capped reimbursement of legal fees of a single special counsel for the holders of the shares, but do not impose any obligations for the Company to pay additional consideration to the holders in case a registration statement is subsequently withdrawn at the request of the holders.

7. Common Stock

As of September 30, 2023, the Company has authorized two series of common stock, designated Class A common stock and Class B convertible common stock. As of December 31, 2022 and September 30, 2023, there were 9,915,013 of Class A common stock issued, and there were 9,629,171 and 9,712,156 Class A common stock outstanding, respectively. As of December 31, 2022 and September 30, 2023, there were 2,744,184 shares of Class B convertible common stock issued and outstanding.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Class B convertible common stockholders are entitled to receive noncumulative dividends at an annual rate of 8%, as may be declared by the board of directors, if any. Class A common stockholders have no dividend rights. Such dividends are not cumulative, and no dividends have been declared or paid by the Company through September 30, 2023.

Class A common stock reserved for future issuance consist of the following:

	December 31, 2022	September 30, 2023
Convertible preferred stock	24,927,830	52,947,011
Class B convertible common stock	2,744,184	2,744,184
Class A common stock options granted and outstanding	5,271,961	9,317,290
Class A shares available for issuance under incentive plans	115,306	1,510,254
Class A common stock warrants	470,000	470,000
Preferred stock warrants	814,495	814,495

8. Warrants

The Company has issued warrants to acquire Class A common stock and Series A convertible preferred stock.

The warrant to purchase Class A common stock has an exercise price of $0.21 per share and was issued in December 2020 with an expiration date in February 2024.

The Series A preferred stock warrants have an exercise price of $2.15 per share and were issued in October 2020 with an expiration date in October 2027. The Series A preferred stock warrants shall no longer be exercisable and become null and void on the date of which the Company consummates the sale of its common stock or other securities in the Company's first underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, or in the event of a deemed liquidation event, provided however that if the holder of any such Series A preferred stock warrant has not exercised the warrant prior to the closing of any such transaction, such Series A preferred stock warrant shall automatically be deemed to be exercised in full pursuant to the net exercise features of such Series A preferred stock warrants immediately prior to the closing of the applicable transaction, without any further action required on the part of the holder thereof.

No warrants were exercised for any of the periods presented.

9. Share-Based Compensation

The Company's 2020 Equity Incentive Plan (the 2020 Plan) provides for the grant of incentive stock options, non-statutory stock options, and other equity awards to the Company's employees, officers, directors, and consultants. As of September 30, 2023, the aggregate number of shares of Class A common stock available for issuance pursuant to awards under the 2020 Plan, as amended, was 11,385,409 shares.

Stock Options

Stock options granted under the 2020 Equity Incentive Plan generally vest over three or four years and expire after 10 years.

The per share exercise price for stock options granted is set at the fair value per share of common stock as determined by the board of directors as of the date of grant. The board of directors determined the value the Company's Class A common stock considering many factors, including third-party valuation of the Company's Class A common shares, as well as additional factors, which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

A summary of stock option activity for awards under the 2020 Plan is presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Lives (years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2022	5,271,961	$ 0.38	6.8	$ 8,080
Granted	4,045,329	$ 1.26	—	
Outstanding as of September 30, 2023	9,317,290	$ 0.76	7.7	$ 10,729
Exercisable as of September 30, 2023	7,219,009	$ 0.62	7.1	$ 9,282
Vested and expected to vest	9,520,144	$ 0.76	7.7	$ 10,977

The weighted average grant date fair value per share of stock options granted during the nine months ended September 30, 2023 was $1.07.

The Company recorded share-based compensation expense of $0.2 million and $0.8 million for the nine months ended September 30, 2022 and 2023, respectively. As of September 30, 2023, there was $1.3 million of unrecognized compensation cost related to unvested share-based compensation arrangements granted under the 2020 Plan, which is expected to be recognized over a weighted average period of 2.9 years.

Share-based compensation expense was as follows (in thousands):

	Nine Months Ended September 30,	
	2022	2023
Selling, general and administrative	$ 293	$ 564
Research and development	51	261
Total	$ 344	$ 825

Liability for Early Exercise of Stock Options

Certain individuals were granted the ability to early exercise their stock options. The shares of Class A common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the accompanying balance sheets and will be transferred into Class A common stock and additional paid-in capital as the shares vest. As of December 31, 2022 and September 30, 2023, 285,839 and 202,854 unvested shares issued under early exercise provisions were subject to repurchase by the Company, respectively. As of December 31, 2022 and September 30, 2023, the Company recorded $0.1 million, associated with early exercised stock options in other long-term liabilities.

10. Net Loss Per Share Attributable to Class A Common Stockholders

The Company's potential dilutive securities, which include convertible preferred stock, options to purchase common stock, Class A common warrants, preferred stock warrants, and Class B convertible common stock, have been excluded from the computation of diluted net loss per share as the effect would be anti-dilutive. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at period end, from the computation of diluted net loss per share attributable to common stockholders for the period indicated because including them would have had an anti-dilutive effect:

	December 31, 2022	September 30, 2023
Convertible preferred stock	24,927,830	52,947,011
Class A common stock options granted and outstanding	5,271,961	9,317,290
Class A common stock warrants	470,000	470,000
Preferred stock warrants	814,495	814,495
Class B convertible common stock	2,744,184	2,744,184
Total	34,228,470	66,292,980

The holders of convertible preferred stock and Class B convertible common stock do not contractually share in losses and therefore no additional net loss per share has been disclosed under the two-class method.

11. License Agreements

In April 2022, the Company entered into a license and collaboration agreement providing an exclusive license (License) to certain of the Company's intellectual property (IP) for use in the treatment of presbyopia in humans in the People's Republic of China. The Company also agreed to negotiate a separate agreement for the purchase of clinical and commercial supply of IP for clinical and commercial requirements at cost plus a negotiated percentage and granted a right of first negotiation to obtain a China regional license on other products the Company might develop.

The Company received nonrefundable, non-creditable upfront payments totaling $15.0 million as initial consideration under the License, which represents the transaction price at inception. In addition, the Company is also eligible to receive up to $95.0 million of regulatory and sales milestones, as well as tiered low double-digit royalties on net sales of IP in the Peoples Republic of China. Additional consideration to be paid to the Company

upon reaching regulatory and sales milestones is excluded from the transaction price. Future milestone payments are fully contingent as the risk of significant revenue reversal will only be resolved depending on future regulatory approval and sales level outcomes. The sales-based royalty fee qualifies for the royalty constraint exception and does not require an estimate of the future transaction price. The sales-based royalty fee is considered variable consideration and will be recognized as revenue as such sales occur, if any.

The Company assessed the promises made under the License and concluded the License comprises a single performance obligation providing the right to use functional intellectual property. The $15.0 million transaction price allocated to that single performance obligation was recognized on completion of the transfer of the License in the nine months ended September 30, 2022. No additional amounts under the License have been paid or were due to the Company at September 30, 2023.

Contemporaneously with entering into the License agreement, a significant investor in the licensee purchased 2,950,548 shares of the Company's Series A-1 Preferred Stock for $10.0 million.

12. Related Party Transactions

In October 2022, the Company issued 9,899,340 shares of its Series A preferred stock for total cash proceeds of $21.3 million to significant shareholders that have designated members on the Company's board of directors and are considered to be related parties.

In March 2023, the Company issued 22,146,905 shares of its Series B preferred stock for total cash proceeds of $66.0 million to significant shareholders that have designated members on the Company's board of directors and are considered to be related parties.

13. Subsequent Events

The Company has evaluated subsequent events through December 6, 2023, the date on which the accompanying condensed financial statements are available to be issued.

Merger Agreement

On November 14, 2023, the Company entered into an Agreement and Plan of Merger (the Merger Agreement) by and among the Company, Graphite Bio, Inc., a Delaware corporation (Graphite) and Generate Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Graphite (Merger Sub), pursuant to which, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into the Company (the Merger), with the Company continuing as a wholly owned subsidiary of Graphite and the surviving corporation of the merger.

On a pro forma basis and based upon the number of shares of Graphite common stock expected to be issued in the Merger, the Company's pre-Merger stockholders will own approximately 65% of the combined company, pre-Merger Graphite stockholders will own approximately 35% of the combined company on a fully-diluted basis (prior to giving effect to the Concurrent PIPE Investment described below and excluding any shares reserved for future grants under the 2024 Plan and the 2024 ESPP, each as defined in the Merger Agreement). Under certain circumstances further described in the Merger Agreement, the ownership percentages may be adjusted upward or downward based on the level of Graphite's net cash at the Closing.

Consummation of the Merger is subject to certain closing conditions, including, among other things, (1) approval by Graphite stockholders of the Graphite Voting Proposals, (2) approval by the requisite Company stockholders of the adoption and approval of the Merger Agreement and the transactions contemplated thereby, (3) the waiting period under the U.S. Hart Scott-Rodino Antitrust Improvements Act of 1976, as amended,

having expired or been terminated, (4) Nasdaq's approval of the listing of the shares of Graphite Common Stock to be issued in connection with the Merger, (5) the effectiveness of the Registration Statement, (6) an executed Subscription Agreement for the Concurrent PIPE Investment (or other Permitted Financing, as defined in the Merger Agreement) in full force and effect evidencing cash proceeds of not less than $50 million to be received by the combined company immediately prior to or following the Closing, (7) the filing of Graphite's Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and (8) Graphite's net cash at Closing, following deduction of the cash dividend defined in the Merger Agreement, being no less than $115,000,000. Each party's obligation to consummate the Merger is also subject to other specified customary conditions, including regarding the accuracy of the representations and warranties of the other party, subject to the applicable materiality standard, and the performance in all material respects by the other party of its obligations under the Merger Agreement required to be performed on or prior to the date of the Closing.

The Merger Agreement contains certain termination rights of each of Graphite and the Company. Upon termination of the Merger Agreement under specified circumstances, Graphite may be required to pay the Company a termination fee of $7,500,000, and in certain other circumstances, the Company may be required to pay Graphite a termination fee of $7,500,000.

Private Placement and Subscription Agreement

On November 14, 2023, Graphite entered into a Subscription Agreement (the Subscription Agreement) with certain existing Company stockholders and new investors (PIPE Investors).

Pursuant to the Subscription Agreement, and subject to the terms and conditions of such agreements, Graphite agreed to sell, and the PIPE Investors agreed to purchase, shares of Graphite common stock for an aggregate purchase price of $53.5 million (collectively, the Concurrent PIPE Investment). The Subscription Agreement provides that the Concurrent PIPE Investment amount (i) must be a minimum of $50 million and (ii) may be increased to up to $125 million through additional subscriptions under the Subscription Agreement from additional PIPE Investors.

The Concurrent PIPE Investment is exempt from registration pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the Securities Act), and/or Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering. The PIPE Investors have acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends have been affixed to the securities issued in this transaction.

Annex A

AGREEMENT AND PLAN OF MERGER

by and among

GRAPHITE BIO, INC.,

GENERATE MERGER SUB, INC.

and

LENZ THERAPEUTICS, INC.

Dated as of November 14, 2023

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AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this "Agreement"), dated as of November 14, 2023, by and among Graphite Bio, Inc., a Delaware corporation ("Parent"), Generate Merger Sub, Inc., a Delaware corporation ("Merger Sub"), and Lenz Therapeutics, Inc., a Delaware corporation (the "Company").

RECITALS

WHEREAS, Parent and the Company intend to effect a merger of Merger Sub with and into the Company (the "Merger") in accordance with this Agreement and the General Corporation Law of the State of Delaware (the "DGCL"). Upon consummation of the Merger, Merger Sub will cease to exist and the Company will become a wholly-owned subsidiary of Parent;

WHEREAS, the parties hereto intend that the Merger qualify as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code") and the Treasury Regulations promulgated thereunder, and that this Agreement be, and hereby is, adopted as a "plan of reorganization" for the purposes of Section 368 of the Code and Treasury Regulations Section 1.368-2(g) (the "Intended Tax Treatment");

WHEREAS, the Board of Directors of the Company (the "Company Board") has (i) determined that the transactions contemplated hereby are fair to, advisable and in the best interests of the Company and its stockholders, (ii) approved and declared advisable this Agreement and the transactions contemplated hereby and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of the Company vote to adopt this Agreement and thereby approve the transactions contemplated hereby;

WHEREAS, the Company Board has approved this Agreement and the Merger, with the Company continuing as the Surviving Company (as defined below), after the Effective Time (as defined below), pursuant to which each share of Company Capital Stock shall be converted into the right to receive a number of shares of common stock, par value $0.00001 per share, of Parent (the "Parent Common Stock") equal to the Exchange Ratio, upon the terms and subject to the conditions set forth in this Agreement;

WHEREAS, Merger Sub is a newly incorporated Delaware corporation that is wholly- owned by Parent, and has been formed for the sole purpose of effecting the Merger;

WHEREAS, effective as of the Closing, the certificate of incorporation of Parent shall be amended in the form attached hereto as Exhibit A (with such changes as may be mutually agreed between Parent and the Company, the "Parent Charter Amendment");

WHEREAS, the Board of Directors of Parent (the "Parent Board") has (i) determined that the transactions contemplated hereby are fair to, advisable and in the best interests of Parent and its stockholders, (ii) approved and declared advisable this Agreement and the transactions contemplated hereby, including the issuance of shares of Parent Common Stock to the stockholders of the Company pursuant to this Agreement and the Parent Support Agreements, (iii) determined and declared that the Charter Amendment Proposals are advisable and in the best interests of Parent and its stockholders, (iv) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of Parent vote to authorize the issuance of the Parent Common Stock in accordance with Nasdaq Listing Rule 5635 (the "Nasdaq Issuance Proposal") and (v) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, as promptly as practicable after the forms thereof are mutually agreed to by Parent and the Company, that the stockholders of Parent vote to approve one or more amendments to Parent's certificate of incorporation to (a) effect the Nasdaq Reverse Stock Split (the "Reverse Stock Split Proposal"), and (b) amend Parent's certificate of incorporation in the form of the Parent Charter Amendment (the "Amended Charter Proposals", and together with the Reverse Stock Split Proposal, the "Charter Amendment Proposals");

WHEREAS, the board of directors of Merger Sub has (i) determined that the transactions contemplated hereby are fair to, advisable and in the best interests of Merger Sub and its sole stockholder, (ii) approved and declared advisable this Agreement and the transactions contemplated hereby and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholder of Merger Sub votes to adopt this Agreement and thereby approve the transactions contemplated hereby;

WHEREAS, Parent, Merger Sub and the Company each desire to make certain representations, warranties, covenants and agreements in connection with the Merger and also to prescribe certain conditions to the Merger as specified herein;

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to the Company's willingness to enter into this Agreement, the officers, directors and stockholders of Parent listed on Section A of the Parent Disclosure Letter have entered into Parent Support Agreements, dated as of the date of this Agreement, in the form attached hereto as Exhibit B (the "Parent Support Agreements"), pursuant to which such officers, directors and stockholders have, subject to the terms and conditions set forth therein, agreed to vote all of their shares of Parent Common Stock in favor of the approval of the Parent Stockholder Proposals;

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement of Parent's willingness to enter into this Agreement, the officers, directors and stockholders of the Company listed on Section A of the Company Disclosure Letter have entered into Company Support Agreements, dated as of the date of this Agreement, in the form attached hereto as Exhibit C (the "Company Support Agreements"), pursuant to which such officers, directors and stockholders have, subject to the terms and conditions set forth therein, agreed to vote all of their shares of Company Capital Stock in favor of the adoption of this Agreement and thereby approve the transactions contemplated hereby;

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to Parent's willingness to enter into this Agreement, certain stockholders of the Company listed on Section B of the Company Disclosure Letter are executing lock-up agreements in the form attached hereto as Exhibit D (the "Lock-Up Agreement");

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to Company's willingness to enter into this Agreement, certain stockholders of Parent listed on Section B of the Parent Disclosure Letter are executing Lock-Up Agreements;

WHEREAS, it is expected that after the Registration Statement is declared effective under the Securities Act, the stockholders of the Company will execute an action by written consent by the holders of (i) at least a majority of the voting power of outstanding shares of Company Capital Stock, (ii) at least a majority of the outstanding shares of Company Preferred Stock and (iii) at least a majority of the outstanding shares of Company Series B Preferred Stock, approving and adopting this Agreement (collectively, subclauses (i), (ii), and (iii), the "Company Stockholder Approval");

WHEREAS, the stockholders of Parent as of the Dividend Record Date (which for clarity shall exclude holders of Parent Common Stock issued as part of the Merger Consideration) shall be entitled to receive from Parent a cash dividend in an aggregate amount of $60,000,000, subject to certain adjustments as set forth herein (the "Cash Dividend"); and

WHEREAS, concurrently with the execution of this Agreement, certain investors (each a "Concurrent PIPE Investor" and collectively the "Concurrent PIPE Investors") have entered into stock purchase agreements representing an aggregate commitment of not less than $50,000,000 (the "Concurrent PIPE Investment Amount") in the form attached hereto as Exhibit E (collectively, the "Subscription Agreement"), pursuant to which such Persons will agree, subject to the terms and conditions set forth therein, to subscribe and purchase a number of shares of Parent Common Stock immediately following the Closing (the "Concurrent PIPE Investment").

AGREEMENT

NOW, THEREFORE, in consideration of the premises, and of the representations, warranties, covenants and agreements contained herein, and intending to be legally bound hereby, Parent, Merger Sub and the Company hereby agree as follows:

ARTICLE I
DEFINITIONS & INTERPRETATIONS

Section 1.1 Certain Definitions. For purposes of this Agreement:

(a) "2023 Equity Incentive Plan" shall mean an equity incentive plan of Parent in form and substance as agreed to by Parent and the Company (such agreement not to be unreasonably withheld, conditioned or delayed by either party), reserving for issuance a number of shares of Parent Common Stock to be determined by the Company in consultation with Parent.

(b) "2023 ESPP" shall mean an "employee stock purchase plan" of Parent in form and substance as agreed to by Parent and the Company (such agreement not to be unreasonably withheld, conditioned or delayed by either party), reserving for issuance a number of shares of Parent Common Stock to be determined by the Company in consultation with Parent.

(c) "2023 Plans" shall mean both the 2023 Equity Incentive Plan and 2023 ESPP.

(d) "Acceptable Confidentiality Agreement" means a confidentiality agreement containing terms not materially less restrictive in the aggregate to the counterparty thereto than the terms of the Confidentiality Agreement, except such confidentiality agreement need not contain any standstill, non-solicitation or no hire provisions. Notwithstanding the foregoing, a Person who has previously entered into a confidentiality agreement with Parent relating to a potential Acquisition Proposal on terms that are not materially less restrictive than the Confidentiality Agreement with respect to the scope of coverage and restrictions on disclosure and use shall not be required to enter into a new or revised confidentiality agreement, and such existing confidentiality agreement shall be deemed to be an Acceptable Confidentiality Agreement.

(e) "Acquisition Inquiry" means, with respect to a party, an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made or submitted by the Company, on the one hand, or Parent, on the other hand, to the other party) that could reasonably be expected to lead to an Acquisition Proposal, other than the Concurrent PIPE Investment or a Permitted Financing.

(f) "Acquisition Proposal" means, with respect to either Parent or the Company, any proposal or offer from any Person (other than Parent or the Company, as applicable, or their respective Representatives) providing for (i) the acquisition or purchase by such Person from a party of a substantial portion of such party's or any of its subsidiaries' capital stock or material assets or (ii) any merger, consolidation, recapitalization or other business combination transaction involving such party (other than in connection with the Concurrent PIPE Investment, a Permitted Financing, Parent's leases, a Parent Legacy Transaction or the exercise or repurchase of existing equity interests).

(g) "Acquisition Transaction" means any transaction or series of related transactions (other than the Concurrent PIPE Investment or a Permitted Financing) involving:

(i) any merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction: (i) in which a party is a constituent entity, (ii) in which a Person or "group" (as defined in the Exchange Act and the rules promulgated thereunder) of Persons directly or indirectly acquires beneficial or

record ownership of securities representing more than 20% of the outstanding securities of any class of voting securities of a party or any of its Subsidiaries or (iii) in which a party or any of its Subsidiaries issues securities representing more than 20% of the outstanding securities of any class of voting securities of such party or any of its Subsidiaries; or

(ii) any sale, lease, exchange, transfer, license, acquisition or disposition of any business or businesses or assets that constitute or account for 20% or more of the consolidated book value of the fair market value of the assets of a party and its Subsidiaries, taken as a whole.

(h) "Affiliate" of any Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such first Person.

(i) "Business Day" means any day other than a Saturday, a Sunday or a day on which banks in New York, New York are authorized or required by applicable Law to be closed.

(j) "Company Capital Stock" means the outstanding shares of Company Common Stock and Company Preferred Stock.

(k) "Company Common Stock" means the outstanding shares of common stock of the Company with a par value per share of $0.001.

(l) "Company Equity Plan" means the Company's 2020 Equity Incentive Plan, as amended.

(m) "Company Fundamental Representations" means each of the representations and warranties of the Company set forth in Section 4.1, Section 4.2, Section 4.3, Section 4.4, Section 4.5(a), and Section 4.24.

(n) "Company Options" means options or other rights to purchase shares of Company Common Stock issued by the Company.

(o) "Company Owned IP" means all Intellectual Property owned by the Company in whole or in part.

(p) "Company Preferred Stock" means the outstanding shares of preferred stock of the Company with a par value per share of $0.001, including, for the avoidance of doubt, the Company Series B Preferred Stock.

(q) "Company Series B Preferred Stock" means the outstanding shares of Company Preferred Stock designated as Series B Preferred Stock.

(r) "Company Triggering Event" shall be deemed to have occurred if: (a) the Company Board shall have approved, endorsed or recommended any Acquisition Proposal, (b) the Company Board shall have made a Company Board Adverse Recommendation Change, or (c) the Company shall have entered into any letter of intent or similar document or any Contract relating to any Acquisition Proposal (other than an Acceptable Confidentiality Agreement permitted pursuant to Section 6.4).

(s) "Company Warrant" means each warrant to purchase Company Capital Stock.

(t) "Confidentiality Agreement" means that certain non-disclosure agreement, dated as of September 6, 2023, between the Company and Parent.

(u) "control" (including the terms "controlled," "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

(v) "HSR Act" means the U.S. Hart Scott-Rodino Antitrust Improvements Act of 1976, as amended.

(w) "Intellectual Property" means all intellectual property rights of any kind or nature in any jurisdiction throughout the world, including all of the following to the extent protected by applicable law: (i) trademarks or service marks (whether registered or unregistered), trade names, domain names, social media user names, social media addresses, logos, slogans, and trade dress, including applications to register any of the foregoing, together with the goodwill symbolized by any of the foregoing; (ii) patents, utility models and any similar or equivalent statutory rights with respect to the protection of inventions, and all applications for any of the foregoing, together with all re-issuances, continuations, continuations-in-part, divisionals, revisions, extensions and reexaminations thereof; (iii) copyrights (registered and unregistered) and applications for registration; (iv) trade secrets and customer lists, in each case to the extent any of the foregoing derives economic value (actual or potential) from not being generally known to other Persons who can obtain economic value from its disclosure or use, and other confidential information ("Trade Secrets"); and (v) any other proprietary or intellectual property rights of any kind or nature.

(x) "knowledge" of any party means (i) the actual knowledge of any executive officer of such party or other officer having primary responsibility for the relevant matter or any employee consultant or interim officer serving similar roles (ii) any fact or matter which any such Person could be expected to discover or otherwise become aware of after reasonable inquiry, consistent with such Person's title and responsibilities, concerning the existence of the relevant matter.

(y) "Mitigated Lease Amounts" means any amounts under a Parent Lease Agreement for which Parent has no liability, either on an absolute or contingent basis, as of the Closing.

(z) "Nasdaq" means the Nasdaq Stock Market, LLC.

(aa) "Nasdaq Reverse Stock Split" means a reverse stock split of all issued shares of Parent Common Stock at a reverse stock split ratio as mutually agreed to by Parent and the Company that is effectuated by Parent for the purpose of maintaining compliance with Nasdaq listing standards.

(bb) "Net Cash" means (i) Parent's cash, cash equivalents and short-term investments, plus (ii) all prepaid expenses, deposits, receivables and restricted cash that Parent and the Company mutually agree will be useable by or available to the Company within 90 days of Closing, minus (iii) the sum of Parent's short-term and long-term liabilities and any unpaid Transaction Expenses accrued at the Closing Date (including any costs, fees or other liabilities, including, without limitation, Taxes, related to the Cash Dividend, the preparation and filing of Parent's Form 10-K, including the preparation and audit of the related audited financial statements, the premiums, commissions and other fees paid or payable in connection with obtaining Parent's D&O tail policy as set forth in Section 7.5(d)), minus (iv) all payables or obligations, whether absolute, contingent or otherwise, related to the Parent Lease Agreements (net of any Mitigated Lease Amounts) minus (v) to the extent payable in cash at Closing and not yet paid, any and all liabilities of Parent to any of its employees (including change of control payments, retention payments, severance payments and any employer-side portion of any payroll or similar Taxes owed in connection with the foregoing or any of Parent's equity plans), minus (vi) the actual costs, or, to the extent not available as of the Cash Determination Time, the mutually agreed estimate for costs associated with the termination of ongoing contractual obligations relating to all Parent Material Contracts and/or the Parent Legacy Business, minus (vii) all actual and reasonably projected costs and expenses relating to the winding down of Parent's prior research and development activities, minus (viii) any and all liabilities of Parent resulting from or in connection with the application of Section 280G of the Code in connection with the Merger. Set forth on Section 1.1(bb) of the Parent Disclosure Letter is an illustrative example of the calculation of Net Cash.

(cc) "Parent Form 10-K" means Parent's Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

(dd) "Parent Fundamental Representations" means each of the representations and warranties of Parent and Merger Sub set forth in Section 5.1(a), Section 5.1(b), Section 5.2, Section 5.3, Section 5.4, Section 5.5(a), Section 5.6(i), Section 5.22 and Section 5.24.

(ee) "Parent Legacy Assets" means all assets, technology and Intellectual Property of Parent as they existed at any time prior to the date of this Agreement, including for purposes of clarity, the tangible and intangible assets, in each case to the extent primarily used in or primarily related to Parent's nulabeglogene autogedtemcel (nula-cel) program, beta-thalassemia program, therapeutic protein production (alpha-globin) program, X-linked combined deficiency syndrome (XSCID) program, Gaucher disease program, and related pre-clinical platform assets and the Non-Genotoxic Targeted Conditioning Technology Assets (NGTC). The business of Parent with respect to the Parent Legacy Assets, the "Parent Legacy Business").

(ff) "Parent Owned IP" means all Intellectual Property owned by Parent in whole or in part.

(gg) "Parent Restricted Stock Awards" means each award with respect to a share of Parent Common Stock outstanding under any Parent Plan subject to risk of forfeiture or repurchase by Parent.

(hh) "Parent Target Net Cash" means $175,000,000 of Net Cash at the Closing.

(ii) "Parent Triggering Event" shall be deemed to have occurred if: (a) Parent shall have failed to include in the Proxy Statement the Parent Board Recommendation, (b) the Parent Board or any committee thereof shall have made a Parent Board Adverse Recommendation Change or approved, endorsed or recommended any Acquisition Proposal or (c) Parent shall have entered into any letter of intent or similar document or any Contract relating to any Acquisition Proposal (other than an Acceptable Confidentiality Agreement permitted pursuant to Section 6.4).

(jj) "Permitted Financing" means purchases of Parent Common Stock immediately following the Closing pursuant to Section 7.16, or otherwise as agreed between Parent and the Company.

(kk) "Permitted Stock Purchase Agreement" means a Contract executed pursuant to which the signatory has agreed to purchase for cash shares of Parent Common Stock immediately following the Closing pursuant to Section 7.16, or otherwise as agreed between Parent and the Company.

(ll) "Person" means an individual, corporation, partnership, limited liability company, association, trust or other entity or organization, including any Governmental Entity.

(mm) "Representative" means a party's directors, officers, employees, investment bankers, financial advisors, attorneys, accountants or other advisors, agents or representatives.

(nn) "SEC" means the Securities and Exchange Commission.

(oo) "Subsequent Transaction" means any Acquisition Transaction (with all references to 20% in the definition of Acquisition Transaction being treated as references to 50% for these purposes).

(pp) "Subsidiary" means, with respect to any Person, any other Person of which stock or other equity interests having ordinary voting power to elect more than 50% of the board of directors or other governing body are owned, directly or indirectly, by such first Person.

(qq) "Superior Offer" means an unsolicited bona fide written Acquisition Proposal (with all references to 20% in the definition of Acquisition Transaction being treated as references to 50% for these purposes) that: (a) was not obtained or made as a direct or indirect result of a breach of (or in violation of) the Agreement and (b) is on terms and conditions that the Parent Board or the Company Board, as applicable, determines in good faith, based on such matters that it deems relevant (including the likelihood of consummation thereof and the financing terms thereof), as well as any written offer by the other party to the Agreement to amend the terms of the Agreement, and following consultation with its outside legal counsel and financial advisors, if any, are more favorable, from a financial point of view, to the Parent's stockholders or the Company's stockholders, as applicable, than the terms of the transactions contemplated hereby.

(rr) "Tax Return" means any return, declaration, report, certificate, bill, election, claim for refund, information return, statement or other written information and any other document filed or supplied or required to be filed or supplied to (or as directed by) any Governmental Entity or any other Person with respect to Taxes, including any schedule, attachment or supplement thereto, and including any amendment thereof.

(ss) "Taxes" means all U.S. federal, state and local and non-U.S. net income, gross income, gross receipts, sales, use, stock, ad valorem, transfer, transaction, franchise, profits, gains, registration, license, wages, lease, service, service use, employee and other withholding, imputed underpayment, social security, unemployment, welfare, disability, payroll, employment, excise, severance, stamp, occupation, workers' compensation, premium, real property, personal property, escheat or unclaimed property, windfall profits, net worth, capital, value-added, alternative or add-on minimum, customs duties, estimated and other taxes, fees, assessments, charges or levies in the nature of a Tax (whether imposed, assessed, determined, administered, enforced or collected directly or through withholding and including taxes of any third party in respect of which a Person may have a duty to collect or withhold and remit and any amounts resulting from the failure to file any Tax Return), whether disputed or not, together with any interest and any penalties, additions to tax or additional amounts with respect thereto (or attributable to the nonpayment thereof).

(tt) "Transaction Expenses" means the aggregate amount (without duplication) of all costs, fees, Taxes and expenses incurred by Parent and Merger Sub, or for which Parent or Merger Sub are or may become liable in connection with the transactions contemplated hereby and the negotiation, preparation and execution of this Agreement or any other agreement, document, instrument, filing, certificate, schedule, exhibit, letter or other document prepared or executed in connection with the transactions contemplated hereby, including (i) 50% of any Transfer Taxes, (ii) any fees and expenses of legal counsel and accountants, (iii) the maximum amount of fees and expenses payable to financial advisors, investment bankers, brokers, consultants, Tax advisors, transfer agents, proxy solicitor and other advisors of Parent, including any Taxes incurred or to be incurred by Parent or Merger Sub with respect to the payment of any item listed in this definition of Transaction Expenses (including the employer-side portion of any payroll or similar Tax), (iv) all fees and expenses incurred in relation to the printing and filing with the SEC of the Registration Statement (including any financial statements and exhibits) and any amendments or supplements thereto and paid to a financial printer or the SEC, (v) all costs and expenses incurred in connection with the engagement and services of the Exchange Agent, and (vi) 50% of the filing fees of Parent in connection with the HSR Act; provided, however, that Transaction Expenses shall specifically exclude (A) any fees and expenses of any placement agent incurred in respect of the Concurrent PIPE Investment, (B) the value of any settlement or judgment that is awarded post-Closing relating to stockholder litigation arising out of or in connection with the transactions contemplated by this Agreement, (C) any filing fees payable in respect of the Nasdaq Listing Application, and (D) 50% of the filing fees of Parent in connection with the HSR Act.

Section 1.2 Interpretation. When a reference is made in this Agreement to a Section, Article, Exhibit or Schedule such reference shall be to a Section, Article, Exhibit or Schedule of this Agreement unless otherwise indicated. The table of contents and headings contained in this Agreement or in any Exhibit or Schedule are for convenience of reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All words used in this Agreement will be construed to be of such gender or number as the circumstances require. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein shall have the meaning as defined in this Agreement. All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth herein. The word "including" and words of similar import when used in this Agreement will mean "including, without limitation," unless otherwise specified. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to the Agreement as a whole and not to any particular provision in this Agreement. The term "or" is not exclusive. The word "will" shall be construed to have the same meaning and effect as the word "shall." References to days mean calendar days unless otherwise specified.

Section 1.3 Currency. All references to "dollars" or "$" or "US$" in this Agreement refer to United States dollars, which is the currency used for all purposes in this Agreement.

ARTICLE II
THE MERGER

Section 2.1 Formation of Merger Sub. Parent has caused Merger Sub to be organized under the laws of the State of Delaware.

Section 2.2 The Merger. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the DGCL, at the Effective Time, Merger Sub shall be merged with and into the Company. Following the Merger, the separate corporate existence of Merger Sub shall cease, and the Company shall continue as the surviving company of the Merger (the "Surviving Company") and a wholly-owned subsidiary of Parent.

Section 2.3 Closing. Unless this Agreement is earlier terminated pursuant to the provisions of Article IX, and subject to the satisfaction or waiver of the conditions set forth in Article VIII, the consummation of the Merger (the "Closing") shall take place remotely by the electronic exchange of documents, as promptly as practicable (but in no event later than the second Business Day following the satisfaction or waiver of the last to be satisfied or waived of the conditions set forth in Article VIII, other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of each of such conditions), unless another time, date and place is mutually agreed upon by Parent and the Company in writing. The date on which the Closing actually takes place is referred to as the "Closing Date."

Section 2.4 Effective Time. Upon the terms and subject to the provisions of this Agreement, at the Closing, the parties shall cause the Merger to be consummated by executing and filing a certificate of merger with respect to the Merger (the "Certificate of Merger") with the Secretary of State of the State of Delaware (the "Delaware Secretary of State"), in such form as is required by, and executed in accordance with the relevant provisions of the DGCL. The Merger shall become effective at such time as the Certificate of Merger is duly filed with the Delaware Secretary of State or at such other time as Parent and the Company shall agree in writing and shall specify in the Certificate of Merger (the time the Merger becomes effective being the "Effective Time").

Section 2.5 Effects of the Merger. At and after the Effective Time, the Merger shall have the effects set forth in this Agreement and in the relevant provisions of the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time, all the property, rights, privileges, powers and franchises of the Company and Merger Sub shall vest in the Surviving Company, and all debts, liabilities and duties of the Company and Merger Sub shall become the debts, liabilities and duties of the Surviving Company.

Section 2.6 Parent Governance.

(a) Parent Certificate of Incorporation. At the Effective Time, the certificate of incorporation of Parent shall be amended in the form of the Parent Charter Amendment by filing the Parent Charter Amendment with the Secretary of State of Delaware, until thereafter amended in accordance with its terms and as provided by applicable Law.

(b) Parent Bylaws. The Bylaws of Parent shall remain in effect as of and following the Effective Time, until thereafter amended in accordance with their terms and as provided by applicable Law.

(c) Board of Directors. The parties shall take all action necessary (including, to the extent necessary, procuring the resignation of any directors on the Parent Board immediately prior to the Effective Time) so that, as of the Effective Time, the number of directors that comprise the full Board of Directors of Parent shall be seven (7) (or such other number of directors as Parent and the Company may mutually agree), and such Board of Directors shall upon the Effective Time initially consist of the Persons set forth in Section 2.6(c) of the Parent Disclosure Letter, which each Person shall be appointed to the particular class set forth on such schedule.

(d) Parent Officers. The parties shall take all action necessary (including, to the extent necessary, procuring the resignation or removal of any officers of Parent immediately prior to the Effective Time) so that, as of the Effective Time, the Parent officers shall initially consist of the Persons set forth in Section 2.6(d) of the Parent Disclosure Letter.

Section 2.7 Surviving Company Governance.

(a) Surviving Company Certificate of Incorporation. At the Effective Time, the Certificate of Incorporation of the Surviving Company shall, by virtue of the Merger and without any further action, be amended and restated to read in its entirety as set forth in an exhibit to the Certificate of Merger, and, as so amended and restated, shall be the Certificate of Incorporation of the Surviving Company until thereafter amended in accordance with applicable Law.

(b) Surviving Company Bylaws. At the Effective Time, the Bylaws of the Surviving Company shall be amended and restated to read in their entirety as the Bylaws of Merger Sub as in effect immediately prior to the Effective Time (except that references to the name of Merger Sub shall be replaced with references to the name of the Surviving Company), and, as so amended and restated, shall be the Bylaws of the Surviving Company until thereafter amended in accordance with applicable Law.

(c) Surviving Company Directors. The directors of Parent immediately following the Effective Time shall be the directors of the Surviving Company until the earlier of their resignation or removal or until their respective successors are duly elected and qualified.

(d) Surviving Company Officers. The officers of Parent immediately following the Effective Time shall be the officers of the Surviving Company until the earlier of their resignation or removal or until their respective successors are duly elected and qualified.

ARTICLE III
EFFECT ON THE CAPITAL STOCK OF THE CONSTITUENT COMPANIES; EXCHANGE OF CERTIFICATES

Section 3.1 Conversion of Capital Stock.

(a) At the Effective Time, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the Company or the holders of any shares of capital stock of Parent, Merger Sub or the Company:

(i) Subject to Section 3.4(f), each share of Company Capital Stock issued and outstanding immediately prior to the Effective Time (other than any Excluded Shares, Dissenting Shares, but including any Company Restricted Shares which shall be subject to Section 3.2 below) shall be converted into and become exchangeable for the right to receive, in exchange for (i) each share of Company Common Stock, a number of shares of Parent Common Stock equal to the Exchange Ratio and (ii) each share of Company Preferred Stock, a number of shares of Parent Common Stock equal to the Exchange Ratio multiplied by the aggregate number of shares of Company Common Stock into which each such share of Company Preferred Stock is then convertible (the "Merger Consideration"). As of the Effective Time, all such shares of Company Capital Stock shall no longer be outstanding and shall automatically be cancelled and shall cease to exist, and shall thereafter only represent the right to receive the Merger Consideration. For purposes of this Agreement, the "Exchange Ratio" shall mean the ratio (rounded to four decimal places) equal to (a) the Company Value Per Share divided by (b) the Parent Value Per Share, in which:

(A) "Company Outstanding Shares" means the total number of shares of Company Capital Stock outstanding on a fully diluted basis immediately prior to the Effective Time, assuming the exercise, conversion and exchange of all options, warrants, conversion rights, exchange rights or any other rights to receive shares of Company Capital Stock which exist immediately prior to the Effective Time.

(B) "Company Valuation" means $231,600,000, provided, however, that if the Company's valuation implied by the pricing of the Concurrent PIPE Investment and/or the Permitted Financing is other than $231,600,000 as agreed by the investors in the Concurrent PIPE Investment and/or the Permitted Financing, the "Company Valuation" will be adjusted on a dollar-for-dollar basis to match such amount.

(C) "Company Value Per Share" equals the Company Valuation divided by the number of Company Outstanding Shares.

(D) "Parent Outstanding Shares" means the total number of shares of Parent Common Stock outstanding immediately prior to the Effective Time (including, without limitation, taking into account the effects of the Nasdaq Reverse Stock Split and the termination of the Out-of-the-Money Parent Options pursuant to Section 7.15(c)) calculated using the treasury stock method, assuming the exercise, conversion or exchange of all options, warrants, conversion rights, exchange rights or any other rights to receive shares of Parent Common Stock which exist immediately prior to the Effective Time. For clarity, all outstanding Parent Options shall be included in the total number of shares of Parent Common Stock for purposes of determining the Parent Outstanding Shares, to the extent not terminated prior to the Closing, and no shares issued in connection with the Concurrent PIPE Investment shall be included in the Parent Outstanding Shares.

(E) "Parent Valuation" means $126,500,000; provided, that if the Final Parent Net Cash is above or below the Parent Target Net Cash by more than $1,000,000, then the Parent Valuation will be adjusted on a dollar-for-dollar basis by the difference of (i) the Final Parent Net Cash and (ii) the Parent Target Net Cash. In addition, and for the avoidance of doubt, the Parent Valuation assumes the consummation of the Cash Dividend in an amount equal to $60,000,000, and to the extent the amount of the Cash Dividend is modified pursuant to the terms of Section 7.14 or otherwise, shall be automatically adjusted on a dollar-for-dollar basis by the difference of (i) $60,000,000 and (ii) the actual amount of the Cash Dividend.

(F) "Parent Value Per Share" equals the Parent Valuation divided by the number of Parent Outstanding Shares.

For the avoidance of doubt and for illustrative purposes only, sample "Exchange Ratio" and "Parent Valuation" calculations are set forth on Section 3.1(a)(i)(F) of the Parent Disclosure Letter.

(ii) At the Effective Time, each share of Parent Common Stock issued and outstanding immediately prior to the Effective Time shall remain outstanding. Immediately following the Effective Time, shares of Parent Common Stock, if any, owned by the Surviving Company shall be surrendered to Parent without payment therefor.

(iii) Each share of Company Capital Stock held in the treasury of the Company or owned, directly or indirectly, by Parent or Merger Sub immediately prior to the Effective Time (collectively, "Excluded Shares") shall automatically be cancelled and shall cease to exist, and no consideration shall be delivered in exchange therefor.

(iv) Each share of common stock, par value $0.001 per share, of Merger Sub issued and outstanding immediately prior to the Effective Time shall be converted into and become one validly issued, fully paid and non-assessable share of common stock, par value $0.001 per share, of the Surviving Company.

Section 3.2 Treatment of Company Restricted Shares. At the Effective Time, each award of restricted shares of Company Common Stock that is unvested and outstanding immediately prior to the Effective Time (such shares, collectively, the "Company Restricted Shares") shall automatically and without any action on the part of the holder thereof, become converted into a number of shares of Parent Common Stock (rounded down to the nearest whole share) equal to the product of (x) the number of Company Restricted Shares and (y) the Exchange Ratio in accordance with Section 3.1(a)(i); provided, that such converted shares of Parent Common Stock shall

be subject to the terms and conditions (including, without limitation, vesting and repurchase provisions) that are otherwise the same as were applicable to such Company Restricted Shares as of immediately prior to the Effective Time. For clarity, the provisions of this Section 3.2 shall not result in a duplication of the issuance of the Merger Consideration in Section 3.1(a)(i), and each share of restricted Company Common Stock shall only be entitled to receive a number of shares of Parent Common Stock equal to the Exchange Ratio once. For the avoidance of doubt, stockholders and equityholders of the Company, in their capacities as such, shall not receive any Cash Dividend pursuant to Section 7.14.

Section 3.3 Treatment of Company Options and Warrants.

(a) At the Effective Time, each Company Option that is outstanding and unexercised immediately prior to the Effective Time under the Company Equity Plan, whether or not vested, shall be converted into and become an option to purchase Parent Common Stock, and Parent shall assume the Company Equity Plan and each such Company Option in accordance with the terms (as in effect as of the date of this Agreement) of the Company Equity Plan and the terms of the stock option agreement by which such Company Option is evidenced (but with changes to such documents as Parent and the Company mutually agree are appropriate to reflect the assumption of the Company Options by Parent to purchase shares of Parent Common Stock). All rights with respect to Company Common Stock under Company Options assumed by Parent shall thereupon be converted into rights with respect to Parent Common Stock. Accordingly, from and after the Effective Time: (i) each Company Option assumed by Parent may be exercised solely for shares of Parent Common Stock, (ii) the number of shares of Parent Common Stock subject to each Company Option assumed by Parent shall be determined by multiplying (A) the number of shares of Company Common Stock that were subject to such Company Option, as in effect immediately prior to the Effective Time, by (B) the Exchange Ratio, and rounding the resulting number down to the nearest whole number of shares of Parent Common Stock, (iii) the per share exercise price for the Parent Common Stock issuable upon exercise of each Company Option assumed by Parent shall be determined by dividing (A) the per share exercise price of Company Common Stock subject to such Company Option, as in effect immediately prior to the Effective Time, by (B) the Exchange Ratio and rounding the resulting exercise price up to the nearest whole cent and (iv) any restriction on the exercise of any Company Option assumed by Parent shall continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Company Option shall otherwise remain unchanged; provided, however, that the Parent Board or a committee thereof shall succeed to the authority and responsibility of the Company Board or any committee thereof with respect to each Company Option assumed by Parent. Notwithstanding anything to the contrary in this Section 3.3(a), the conversion of each Company Option (regardless of whether such option qualifies as an "incentive stock option" within the meaning of Section 422 of the Code) into an option to purchase shares of Parent Common Stock shall be made in a manner consistent with Treasury Regulations Section 1.424-1, such that the conversion of a Company Option shall not constitute a "modification" of such Company Option for purposes of Section 409A or Section 424 of the Code.

(b) Parent shall file with the SEC, as soon as reasonably practicable after the Effective Time, a registration statement on Form S-8 (or any successor form), if available for use by Parent, relating to the shares of Parent Common Stock issuable with respect to Company Options assumed by Parent in accordance with Section 3.3(a)(i).

(c) At the Effective Time, each Company Warrant outstanding immediately prior to the Effective Time (that shall not terminate per its own terms upon the Effective Time) shall be automatically assumed by Parent and shall become a warrant to acquire, on the same terms and conditions as were applicable under such Company Warrant, such number of shares of Parent Common Stock as is equal to the number of shares of Company Common Stock (or shares of Company Common Stock issuable upon the conversion of Company Preferred Stock) subject to the unexercised portion of such Company Warrant immediately prior to the Effective Time multiplied by the Exchange Ratio (rounded down to the nearest whole share number), at an exercise price per share equal to the exercise price per share of such Company Warrant immediately prior to the Effective Time divided by the Exchange Ratio (rounded up to the nearest whole cent) (each, as so adjusted, an "Adjusted

Warrant"). The Company shall, prior to the Effective Time, take all actions necessary or desirable in connection with the treatment of Company Warrants contemplated by this Section 3.3(c). Parent shall take all corporate actions necessary to reserve for issuance of shares of Parent Common Stock that will be subject to the Adjusted Warrants.

Section 3.4 Exchange and Payment.

(a) Parent shall issue and deposit (or cause to be deposited) with a bank or trust company designated by Parent (the "Exchange Agent"), in trust for the benefit of holders of shares of Company Capital Stock immediately prior to the Effective Time (other than holders to the extent they hold Excluded Shares or Dissenting Shares), book-entry shares (or certificates if requested) representing the shares of Parent Common Stock issuable pursuant to Section 3.1(a)(i). In addition, Parent shall make available by depositing with the Exchange Agent, as necessary from time to time after the Effective Time any dividends or other distributions payable pursuant to Section 3.4(d) (which for clarity shall not include the Cash Dividend). All certificates representing shares of Parent Common Stock, and any dividends, distributions and cash deposited with the Exchange Agent are hereinafter referred to as the "Exchange Fund."

(b) As soon as reasonably practicable after the date hereof, and in any event no more than ten (10) Business Days prior to the anticipated Closing Date, the parties shall cause the Exchange Agent to mail to each holder of record of a certificate that immediately prior to the Effective Time represented outstanding shares of Company Capital Stock (collectively, the "Certificates") and to each holder of record of uncertificated shares of Company Capital Stock represented by book entry ("Book-Entry Shares") that were converted into the right to receive the Merger Consideration (together with any dividends or other distributions payable pursuant to Section 3.4(d), but not the Cash Dividend), (i) a form of letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to any Certificates held by such Person shall pass, only upon proper delivery of such Certificates, if any, and identification of the Book- Entry Shares, if any, to the Exchange Agent, and which letter shall be in customary form and contain such other provisions as Parent or the Exchange Agent may reasonably specify) and (ii) instructions for use in effecting the surrender of any such Certificates and identifying such Book-Entry Shares in exchange for the Merger Consideration (together with any dividends or other distributions payable pursuant to Section 3.4(d), but not the Cash Dividend). Upon surrender of a Certificate and identification of the Book-Entry Shares, as applicable, to the Exchange Agent, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto, and such other documents as the Exchange Agent may reasonably require, the holder of such Certificate or Book-Entry Share shall be entitled to receive in exchange for the shares of Company Capital Stock formerly represented by such Certificate or Book-Entry Share (other than Excluded Shares or Dissenting Shares) (A) that number of whole shares of Parent Common Stock (after taking into account all shares of Company Capital Stock then held by such holder under all Certificates so surrendered and Book-Entry Shares so identified) to which such holder of Company Capital Stock shall have become entitled pursuant to Section 3.1(a)(i) (which shall be in uncertificated book-entry form unless a physical certificate is requested, and which shall be issued not earlier than the day after the Dividend Record Date), and (B) any dividends or other distributions payable pursuant to Section 3.4(d) (but not the Cash Dividend), and any Certificate so surrendered, together with any Book-Entry Shares, shall forthwith be cancelled. No interest will be paid or accrued on any unpaid dividends and distributions, if any, payable to holders of Certificates or Book-Entry Shares. Until surrendered as contemplated by this Section 3.4, each Certificate or Book-Entry Share shall be deemed after the Effective Time to represent only the right to receive the Merger Consideration payable in respect thereof (together with any dividends or other distributions payable pursuant to Section 3.4(d), but not the Cash Dividend).

(c) If payment of the Merger Consideration is to be made to a Person other than the Person in whose name the surrendered Certificate or Book-Entry Share is registered, it shall be a condition of payment that such Certificate so surrendered shall be properly endorsed or shall be otherwise in proper form for transfer or such Book-Entry Share shall be properly transferred and that the Person requesting such payment shall have paid any transfer and other Taxes required by reason of the payment of the Merger Consideration to a Person other than

the registered holder of such Certificate or Book-Entry Share or shall have established to the satisfaction of Parent that such Tax is not applicable.

(d) (i) Holders of Company Capital Stock, in their capacities as such, shall not be entitled to any portion of the Cash Dividend, and the Certificates and Book-Entry Shares shall not represent any right to any portion of the Cash Dividend.

(ii) No dividends or other distributions with respect to Parent Common Stock with a record date after the Effective Time shall be paid to the holder of any unsurrendered Certificate with respect to the shares of Parent Common Stock that the holder thereof has the right to receive upon the surrender thereof until the holder thereof shall surrender such Certificate in accordance with this Article III. Following the surrender of a Certificate in accordance with this Article III, there shall be paid to the record holder thereof, without interest, (A) promptly after such surrender, the amount of any dividends or other distributions with a record date after the Effective Time theretofore paid with respect to such whole shares of Parent Common Stock, and (B) at the appropriate payment date, the amount of dividends or other distributions with a record date after the Effective Time but prior to such surrender and a payment date subsequent to such surrender payable with respect to such whole shares of Parent Common Stock.

(iii) Holders of Book-Entry Shares who are entitled to receive shares of Parent Common Stock under this Article III shall be paid (A) at the time of payment of such Parent Common Stock by the Exchange Agent under Section 3.4(b), the amount of dividends or other distributions with a record date after the Effective Time theretofore paid with respect to such whole shares of Parent Common Stock, and (B) at the appropriate payment date, the amount of dividends or other distributions (other than the Cash Dividend) with a record date after the Effective Time but prior to the time of such payment by the Exchange Agent under Section 3.4(b) and a payment date subsequent to the time of such payment by the Exchange Agent under Section 3.4(b) payable with respect to such whole shares of Parent Common Stock.

(e) The Merger Consideration (together with any dividends or other distributions payable pursuant to Section 3.4(d) but not the Cash Dividend) shall be deemed to have been issued and paid in full satisfaction of all rights pertaining to the shares of Company Capital Stock formerly represented by such Certificates or Book-Entry Shares. At the Effective Time, the stock transfer books of the Company shall be closed and there shall be no further registration of transfers of the shares of Company Capital Stock that were outstanding immediately prior to the Effective Time. If, after the Effective Time, Certificates are presented to the Surviving Company or the Exchange Agent for transfer or transfer is sought for Book-Entry Shares, such Certificates or Book-Entry Shares shall be cancelled and exchanged as provided in this Article III.

(f) No fractional shares of Parent Common Stock shall be issued in connection with the Merger, and no certificates or scrip for any such fractional shares shall be issued, with no cash being paid for any fractional share eliminated by such rounding.

(g) Any portion of the Exchange Fund that remains undistributed to the holders of Certificates or Book-Entry Shares six months after the Effective Time shall be delivered to the Surviving Company, upon demand, and any remaining holders of Certificates or Book-Entry Shares (except to the extent representing Excluded Shares or Dissenting Shares) shall thereafter look only to the Surviving Company, as general creditors thereof, for payment of the Merger Consideration (together with any dividends or other distributions payable pursuant to Section 3.4(d) but not the Cash Dividend) (subject to abandoned property, escheat or other similar laws), without interest.

(h) None of Parent, the Surviving Company, the Exchange Agent or any other Person shall be liable to any Person in respect of shares of Parent Common Stock, dividends or other distributions with respect thereto properly delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law. If any Certificates or Book-Entry Shares shall not have been exchanged prior to two years after the Effective Time

(or immediately prior to such earlier date on which the related Merger Consideration (and all dividends or other distributions with respect to shares of Parent Common Stock) would otherwise escheat to or become the property of any Governmental Entity), any such Merger Consideration (and such dividends, distributions and cash) in respect thereof shall, to the extent permitted by applicable Law, become the property of the Surviving Company, free and clear of all claims or interest of any Person previously entitled thereto.

(i) The Exchange Agent shall invest any cash included in the Exchange Fund as directed by Parent on a daily basis. Any interest and other income resulting from such investments shall be paid to Parent.

(j) If any Certificate shall have been lost, stolen or destroyed, upon the making of an affidavit, in form and substance reasonably acceptable to Parent, of that fact by the Person claiming such Certificate to be lost, stolen or destroyed, then not earlier than the day after the Dividend Record Date, the Exchange Agent will deliver in exchange for such lost, stolen or destroyed Certificate the Merger Consideration payable in respect thereof (together with any dividends or other distributions payable pursuant to Section 3.4(d) but not the Cash Dividend).

Section 3.5 Withholding Rights. Parent, the Surviving Company and the Exchange Agent (each, a "Withholding Agent") shall each be entitled to deduct and withhold, or cause to be deducted and withheld, from the consideration otherwise payable pursuant to this Agreement such amounts as any Withholding Agent is required to deduct and withhold under applicable Law. To the extent that amounts are so deducted and withheld by a Withholding Agent and remitted to the appropriate Governmental Entity, such amounts shall be treated for all purposes of this Agreement as having been paid to the Person in respect of whom such deduction and withholding was made. Except in connection with either a failure of the Company to comply with Section 8.3(e) or payments under this Agreement in respect of Company Restricted Shares for which an election under Section 83(b) of the Code has not been filed, the Withholding Agent shall use commercially reasonable efforts to (i) notify each holder of Company Capital Stock at least five (5) Business Days prior to deducting or withholding any amounts of its intent to deduct and withhold and (ii) cooperate with such holder to minimize any such deductions and withholding.

Section 3.6 Dissenters Rights. Notwithstanding anything in this Agreement to the contrary, each share of the Company Capital Stock (other than Excluded Shares) outstanding immediately prior to the Effective Time and held by a holder who is entitled to demand and has properly demanded appraisal for such shares of the Company Capital Stock in accordance with Section 262 of the DGCL and, as of the Effective Time, have neither effectively withdrawn nor lost their rights to such appraisal and payment under the DGCL ("Dissenting Shares"), shall not be converted into or be exchangeable for the right to receive a portion of the Merger Consideration but shall be entitled only to such rights as are granted by Section 262 of the DGCL, unless and until such holder fails to perfect or withdraws or otherwise loses such holder's right to appraisal and payment under the DGCL. If, after the Effective Time, any such holder fails to perfect or withdraws or loses such holder's right to appraisal, such Dissenting Shares shall thereupon be treated as if they had been converted as of the Effective Time into the right to receive the portion of the Merger Consideration, if any, to which such holder is entitled pursuant to Section 3.1(a)(i), without interest. The Company shall give Parent (a) prompt notice of any demands received by the Company for appraisal of any shares of the Company Capital Stock issued and outstanding immediately prior to the Effective Time, attempted written withdrawals of such demands, and any other instruments served pursuant to the DGCL and received by the Company relating to stockholders' rights to appraisal with respect to the Merger and (b) the opportunity to participate in all negotiations and proceedings with respect to any exercise of such appraisal rights under the DGCL. The Company shall not, except with the prior written consent of Parent, which shall not be unreasonably withheld, conditioned or delayed, voluntarily make any payment with respect to any demands for payment of fair value for capital stock of the Company, offer to settle or settle any such demands or approve any withdrawal of any such demands.

Section 3.7 Calculation of Net Cash.

(a) Not less than ten Business Days prior to the anticipated date for Closing as mutually agreed in good faith by Parent and the Company (the "Anticipated Closing Date"), Parent will deliver to the Company a schedule (the "Parent Net Cash Schedule", and the date of delivery of the Parent Net Cash Schedule, the "Delivery Date") setting forth, in reasonable detail, Parent's good faith, estimated calculation of Net Cash (the "Parent Net Cash Calculation") as of the close of business on the Closing Date (the "Cash Determination Time") prepared and certified by Parent's chief financial officer (or if there is no chief financial officer at such time, the principal financial and accounting officer for Parent). Parent shall make available to the Company (electronically to the greatest extent possible), as reasonably requested by the Company, the work papers and back-up materials used or useful in preparing the Parent Net Cash Schedule and, if reasonably requested by the Company, Parent's accountants and counsel at reasonable times and upon reasonable notice.

(b) Within five Business Days after the Delivery Date (the last day of such period, the "Response Date"), the Company shall have the right to dispute any part of the Parent Net Cash Calculation by delivering a written notice to that effect to Parent (a "Dispute Notice"). Any Dispute Notice shall identify in reasonable detail and to the extent known the nature and amounts of any proposed revisions to the Parent Net Cash Calculation.

(c) If, on or prior to the Response Date, the Company notifies Parent in writing that is has no objections to the Parent Net Cash Calculation or, if prior to 5:00 p.m. (New York City time) on the Response Date, the Company has failed to deliver a Dispute Notice as provided in Section 3.7(b), then the Parent Net Cash Calculation as set forth in the Parent Net Cash Schedule shall be deemed to have been finally determined for purposes of this Agreement and to represent the Parent Net Cash at the Cash Determination Time (the "Final Parent Net Cash") for purposes of this Agreement.

(d) If the Company delivers a Dispute Notice on or prior to 5:00 p.m. (California time) on the Response Date, then Representatives of Parent and the Company shall promptly, and in no event later than one calendar day after the Response Date, meet and attempt in good faith to resolve the dispute item(s) and negotiate an agreed-upon determination of Net Cash, which agreed upon Net Cash amount shall be deemed to have been finally determined for purposes of this Agreement and to represent the Final Parent Net Cash for purposes of this Agreement.

(e) If Representatives of Parent and the Company are unable to negotiate an agreed-upon determination of the Final Parent Net Cash pursuant to Section 3.7(d) within two calendar days after delivery of the Dispute Notice (or such other period as Parent and the Company may mutually agree upon), then any remaining disagreements as to the calculation of Net Cash shall be referred to an independent auditor of recognized national standing jointly selected by Parent and the Company (the "Accounting Firm"). Parent shall promptly deliver to the Accounting Firm all work papers and back-up materials used in preparing the Parent Net Cash Schedule, and Parent and the Company shall use commercially reasonable efforts to cause the Accounting Firm to make its determination within five calendar days of accepting its selection. Parent and the Company shall be afforded the opportunity to present to the Accounting Firm any material related to the unresolved disputes and to discuss the issues with the Accounting Firm; provided, however, that no such presentation or discussion shall occur without the presence of a Representative of each of Parent and the Company. The determination of the Accounting Firm shall be limited to the disagreements submitted to the Accounting Firm. The determination of the amount of Net Cash made by the Accounting Firm shall be made in writing delivered to each of Parent and the Company, shall be final and binding on Parent and the Company and shall be deemed to have been finally determined for purposes of this Agreement and to represent the Final Parent Net Cash for purposes of this Agreement. The parties shall delay the Closing until the resolution of the matters described in this Section 3.7(e). The fees and expenses of the Accounting Firm shall be allocated between Parent and the Company in the same proportion that the disputed amount of the Net Cash that was unsuccessfully disputed amount by such party (as finally determined by the Accounting Firm) bears to the total disputed amount of the Net Cash amount and such portion of the costs and expenses of the Accounting Firm borne by the Company and any other fees, costs or expenses

incurred by the Company following the Anticipated Closing Date in connection with the procedures set forth in this Section 3.7(e) shall be deducted from the final determination of the amount of Net Cash, to the extent of available amounts. If this Section 3.7(e) applies as to the determination of the Final Parent Net Cash described in Section 3.7(a), upon resolution of the matter in accordance with this Section 3.7(e), the parties shall not be required to determine the Net Cash again even though the Closing Date may occur later than the Anticipated Closing Date, except that either Parent and the Company may require a redetermination of the Final Parent Net Cash if the Closing Date is more than ten calendar days after the Anticipated Closing Date.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the corresponding section or subsection of the disclosure letter delivered by the Company to Parent (the "Company Disclosure Letter") (it being agreed that the disclosure of any information in a particular section or subsection of the Company Disclosure Letter shall be deemed disclosure of such information with respect to any other section or subsection of this Agreement to which the relevance of such information is readily apparent on its face), the Company represents and warrants to Parent and Merger Sub as follows:

Section 4.1 Organization, Standing and Power.

(a) The Company (i) is an entity duly organized, validly existing and in good standing under the Laws of the jurisdiction of its organization, (ii) has all requisite corporate or similar power and authority to own, lease and operate its properties and to carry on its business as now being conducted and (iii) is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the nature of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except in the case of clause (iii), where the failure to be so qualified or licensed or in good standing, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect. For purposes of this Agreement, "Material Adverse Effect" means any event, change, circumstance, occurrence, effect or state of facts that is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, results of operations of the Company, taken as a whole; provided, however, that Material Adverse Effect shall not include any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from (1) changes or conditions generally affecting the industries in which the Company operates, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or Law or other action by any Governmental Entity in response thereto, (3) changes in Law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of this Agreement, (5) any failure to meet internal or other estimates, predictions, projections or forecasts (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded by the other provisions hereof), or (6) any specific action taken (or omitted to be taken) by the Company at or with the express written consent of Parent or required by or expressly permitted by the terms of this Agreement; provided, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts shall be excluded only to the extent it is not disproportionately adverse to the Company as compared to other participants in the industries in which the Company operates.

(b) The Company has previously made available to Parent true and complete copies of the Company's Certificate of Incorporation (the "Company Charter") and Bylaws (the "Company Bylaws") and the Certificate of Incorporation and Bylaws of the Company, in each case as amended to the date of this Agreement, and each as so delivered is in full force and effect. The Company is not in violation of any provision of its Certificate of Incorporation or Bylaws.

Section 4.2 Capital Stock.

(a) The authorized capital stock of the Company consists of 135,723,937 shares of Company Capital Stock. As of the close of business on November 8, 2023 (the "Company Measurement Date"), (i) 12,659,197 shares of Company Common Stock (excluding treasury shares) were issued and outstanding (of which 184,413 shares are the Company Restricted Shares), (ii) 52,947,011 shares of Company Preferred Stock were issued and outstanding, (iii) 9,317,290 Company Options were issued and outstanding, and (iv) no shares of Company Capital Stock were held by the Company in its treasury. Except as set forth above in this Section 4.2(a) or Section 4.2(a) of the Company Disclosure Letter, all outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable and not subject to any preemptive rights. Except as set forth above in this Section 4.2(a) and Section 4.2(b) of the Company Disclosure Letter, the Company does not have any outstanding bonds, debentures, notes or other obligations having the right to vote (or convertible into, or exchangeable or exercisable for, securities having the right to vote) with the stockholders of the Company on any matter. Except as set forth above in this Section 4.2(a) and Section 4.2(a) and Section 4.2(b) of the Company Disclosure Letter and except for changes since the close of business on the Company Measurement Date resulting from the exercise of any options as described above, as of the Company Measurement Date, the Company does not have any outstanding (A) shares of capital stock or other voting securities or equity interests of the Company, (B) securities of the Company convertible into or exchangeable or exercisable for shares of capital stock of the Company or other voting securities or equity interests of the Company, (C) stock appreciation rights, "phantom" stock rights, performance units, interests in or rights to the ownership or earnings of the Company or other equity equivalent or equity-based awards or rights, (D) subscriptions, options, warrants, calls, commitments, Contracts or other rights to acquire from the Company, or obligations of the Company to issue, any shares of capital stock of the Company, voting securities, equity interests or securities convertible into or exchangeable or exercisable for capital stock or other voting securities or equity interests of the Company or rights or interests described in the preceding clause (C), or (E) obligations of the Company to repurchase, redeem or otherwise acquire any such securities or to issue, grant, deliver or sell, or cause to be issued, granted, delivered or sold, any such securities. There are no stockholder agreements, voting trusts or other agreements or understandings to which the Company is a party or of which the Company has knowledge with respect to the holding, voting, registration, redemption, repurchase or disposition of, or that restricts the transfer of, any capital stock or other voting securities or equity interests of the Company.

(b) Section 4.2(b) of the Company Disclosure Letter sets forth a true and complete list of all holders, as of the date hereof, of outstanding Company Restricted Shares, Company Options and other similar rights to purchase or receive shares of Company Capital Stock under the Company Equity Plan, or otherwise, and Company Warrants (collectively, "Company Stock Awards"), indicating as applicable, with respect to each Company Stock Award then outstanding, the type of award granted, the number of shares of Company Common Stock subject to such Company Stock Award, the name of the agreement under which such Company Stock Award was granted, the date of grant, exercise or purchase price, vesting schedule, payment schedule (if different from the vesting schedule) and expiration thereof, the vesting status, whether the Company Stock Award is a non-statutory stock option or qualifies as an "incentive stock option" as defined in Section 422 of the Code, whether an 83(b) election was timely filed, and whether (and to what extent) the vesting of such Company Stock Award will be accelerated or otherwise adjusted in any way or any other terms will be triggered or otherwise adjusted in any way by the consummation of the Merger and the other transactions contemplated by this Agreement or by the termination of employment or engagement or change in position of any holder thereof following or in connection with the Merger. The Company has made available to Parent true and complete copies of all the forms of all award agreements evidencing outstanding Company Stock Awards. The Company does not sponsor, maintain or administer any employee or director stock option, stock purchase or equity compensation plan or arrangement other than the ones issued under the Company Equity Plan. The Company is not under any obligation to issue shares of Company Capital Stock pursuant to any employee or director stock option, stock purchase or equity compensation plan or arrangement other than the ones issued under the Company Equity Plan.

Section 4.3 Subsidiaries. The Company does not have, nor has it ever had, any Subsidiaries. The Company does not own, directly or indirectly, any equity, membership interest, partnership interest, joint venture interest, or other equity or voting interest in, or any interest convertible into, exercisable or exchangeable for any of the foregoing, nor is it under any current or prospective obligation to form or participate in, provide funds to, make any loan, capital contribution, guarantee, credit enhancement or other investment in, or assume any liability or obligation of, any Person.

Section 4.4 Authority.

(a) The Company has all necessary corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The execution, delivery and performance of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of the Company and no other corporate proceedings on the part of the Company are necessary to approve this Agreement or to consummate the Merger and the other transactions contemplated hereby, subject, in the case of the consummation of the Merger, to receipt of the Company Stockholder Approval. This Agreement has been duly executed and delivered by the Company and, assuming the due authorization, execution and delivery by Parent and Merger Sub, constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity).

(b) The Company Board, at a meeting duly called and held at which all directors of the Company were present, duly and adopted resolutions (i) determining that the terms of this Agreement, the Concurrent PIPE Investment, the Company Support Agreements, the Merger and the other transactions contemplated hereby are fair to and in the best interests of the Company's stockholders, (ii) approving and declaring advisable this Agreement and the transactions contemplated hereby, including the Merger, (iii) directing that this Agreement be submitted to the stockholders of the Company for adoption, and (iv) resolving to recommend that the Company's stockholders vote in favor of the adoption of this Agreement and the transactions contemplated hereby, including the Merger, which resolutions have not been subsequently rescinded, modified or withdrawn in any way.

(c) The Company Stockholder Approval is the only vote of the holders of any class or series of the Company Capital Stock or other securities required in connection with the consummation of the Merger. Other than the Company Stockholder Approval, no vote of the holders of any class or series of the Company's capital stock or other securities is required in connection with the consummation of any of the transactions contemplated hereby to be consummated by the Company.

Section 4.5 No Conflict; Consents and Approvals.

(a) Except as set forth in Section 4.5(a) of the Company Disclosure Letter, the execution, delivery and performance of this Agreement by the Company does not, and the consummation of the Merger and the other transactions contemplated hereby and compliance by the Company with the provisions hereof will not, conflict with, or result in any violation or breach of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of, or result in, termination, cancellation, modification or acceleration of any obligation or to the loss of a benefit under, or result in the creation of any pledge, claim, lien, charge, option, right of first refusal, encumbrance or security interest of any kind or nature whatsoever (including any limitation on voting, sale, transfer or other disposition or exercise of any other attribute of ownership) (collectively, "Liens") in or upon any of the properties, assets or rights of the Company under, or give rise to any increased, additional, accelerated or guaranteed rights or entitlements under, or require any consent, waiver or approval of any Person pursuant to, any provision of (i) the Company Charter or Company Bylaws, (ii) any material bond, debenture, note, mortgage, indenture, guarantee, license, lease, purchase or sale order or other contract, commitment, agreement, instrument, obligation, arrangement, understanding, undertaking, permit, concession or franchise, whether oral or written

(each, including all amendments thereto, a "Contract") to which the Company is a party or by which the Company or any of its properties or assets may be bound or (iii) subject to the governmental filings and other matters referred to in Section 4.5(b), any federal, state, local or foreign law (including common law), statute, ordinance, rule, code, regulation, order, judgment, injunction, decree or other legally enforceable requirement ("Law") applicable to the Company or by which the Company or any of its properties or assets may be bound, except as, in the case of clauses (ii) and (iii), as individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect.

(b) No consent, approval, order or authorization of, or registration, declaration, filing with or notice to, any federal, state, local or foreign government or subdivision thereof or any other governmental, administrative, judicial, arbitral, legislative, executive, regulatory or self- regulatory authority, instrumentality, agency, commission or body (each, a "Governmental Entity") is required by or with respect to the Company in connection with the execution, delivery and performance of this Agreement by the Company or the consummation by the Company of the Merger and the other transactions contemplated hereby or compliance with the provisions hereof, except for (i) the filing of the pre-merger notification report under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, (ii) the filing with the SEC of such reports under Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as may be required in connection with this Agreement and the transactions contemplated hereby, (iii) such other filings and reports as may be required pursuant to the applicable requirements of the Securities Act of 1933, as amended (the "Securities Act"), the Exchange Act and any other applicable state or federal securities, takeover and "blue sky" laws, (iv) the filing of the Certificate of Merger with the Delaware Secretary of State as required by the DGCL, and (v) such other consents, approvals, orders, authorizations, registrations, declarations, filings or notices the failure of which to be obtained or made, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect.

Section 4.6 Financial Statements.

(a) True and complete copies of the audited balance sheet of the Company as at December 31, 2022 and December 31, 2021, and the related audited statements of income, retained earnings, stockholders' equity and changes in financial position of the Company, together with all related notes and schedules thereto, accompanied by the reports thereon of the Company's independent auditors (collectively referred to as the "Company Financial Statements") and the unaudited balance sheet of the Company as at September 30, 2023 (the "Company Balance Sheet"), and the related statements of income, retained earnings, stockholders' equity and changes in financial position of the Company, together with all related notes and schedules thereto (collectively referred to as the "Company Interim Financial Statements"), are attached hereto as Section 4.6(a) of the Company Disclosure Letter. Each of the Company Financial Statements and the Company Interim Financial Statements (i) are correct and complete in all material respects and have been prepared in accordance with the books and records of the Company; (ii) have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") applied on a consistent basis throughout the periods indicated (except as may be indicated in the notes thereto); and (iii) fairly present, in all material respects, the financial position, results of operations and cash flows of the Company as at the respective dates thereof and for the respective periods indicated therein, except as otherwise noted therein and subject, in the case of the Company Interim Financial Statements, to normal and recurring year-end adjustments that will not, individually or in the aggregate, be material.

(b) The Company maintains a system of internal accounting controls designed to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of the financial statements of the Company in conformity with GAAP and to maintain accountability of the Company's assets, (iii) access to the Company's assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accounting for the Company's assets is compared with the existing assets at regular intervals and appropriate action is taken with respect to any differences. The Company maintains internal control over financial reporting

that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

(c) Since January 1, 2023, neither the Company nor its independent auditors have identified (i) any significant deficiency or material weakness in the design or operation of the system of internal accounting controls utilized by the Company, (ii) any fraud, whether or not material, that involves the Company, the Company's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by the Company or (iii) any claim or allegation regarding any of the foregoing.

Section 4.7 No Undisclosed Liabilities. The Company does not have any liabilities or obligations of any nature, whether accrued, absolute, contingent or otherwise, known or unknown, whether due or to become due and whether or not required to be recorded or reflected on a balance sheet under GAAP, except (a) to the extent specifically and adequately accrued or reserved against in the Company Balance Sheet, (b) for liabilities and obligations incurred in the ordinary course of business consistent with past practice (none of which is a liability for a breach or default under any contract, breach of warranty, tort, infringement, misappropriation or violation of law) since the date of the Company Balance Sheet that are not individually or in the aggregate material to the Company, or (c) executory obligations under any Contracts to which the Company is a party and which do not result from a breach of such Contract by the Company.

Section 4.8 Absence of Certain Changes or Events. Except as set forth in Section 4.8 of the Company Disclosure Letter, since the Company Balance Sheet Date until the date hereof: (i) except in connection with the execution of this Agreement and the consummation of the transactions contemplated hereby, the Company has conducted its business only in the ordinary course consistent with past practice; (ii) there has not been any change, event or development or prospective change, event or development that, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect; and (iii) the Company has not:

(a) (i) declared, set aside or paid any dividends on, or made any other distributions (whether in cash, stock or property) in respect of, any of its capital stock or other equity interests, (ii) purchased, redeemed or otherwise acquired shares of capital stock or other equity interests of the Company or any options, warrants, or rights to acquire any such shares or other equity interests, other than pursuant to award agreements underlying Company Stock Awards granted under the Company Equity Plan in connection with a Company service provider's termination of service, or (iii) split, combined, reclassified or otherwise amended the terms of any of its capital stock or other equity interests or issued or authorized the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or other equity interests, other than issuances of Company Stock Awards granted to Company service providers under the Company Equity Plan;

(b) amended or otherwise changed, or authorized or proposed to amend or otherwise change, its certificate of incorporation or by-laws (or similar organizational documents);

(c) adopted or entered into a plan of complete or partial liquidation, dissolution, restructuring, recapitalization or reorganization; or

(d) changed its financial or Tax accounting methods, principles or practices, except insofar as may have been required by a change in GAAP or applicable Law.

Section 4.9 Litigation. There is no action, suit, claim, arbitration, investigation, inquiry, grievance or other proceeding (each, an "Action") (or, to the Company's knowledge, any basis therefore) pending or, to the knowledge of the Company, threatened against or affecting the Company, any of its properties or assets, or any present or former officer, director or employee of the Company in such individual's capacity as such, other than any Action that (a) does not involve an amount in controversy in excess of $100,000 and (b) does not seek injunctive or other non-monetary relief. Neither the Company nor any of its properties or assets is subject to any

outstanding judgment, order, injunction, rule or decree of any Governmental Entity. There is no Action pending or, to the knowledge of the Company, threatened seeking to prevent, hinder, modify, delay or challenge the Merger or any of the other transactions contemplated by this Agreement.

Section 4.10 Compliance with Laws. The Company is and has been in compliance in all material respects with all Laws applicable to its businesses, operations, properties or assets. The Company has not received, as of the three (3) years immediately preceding the date hereof, a notice or other written communication alleging or relating to a possible material violation of any Law applicable to their businesses, operations, properties, assets or Company Products (as defined below). The Company has in effect all material permits, licenses, variances, exemptions, applications, approvals, clearances, authorizations, registrations, formulary listings, consents, operating certificates, franchises, orders and approvals of all Governmental Entities necessary and required for it to own, lease or operate its properties and assets and to carry on its businesses and operations as now conducted (collectively, "Permits"), except where such failure would not reasonably be expected to result in a Material Adverse Effect.

Section 4.11 Health Care Regulatory Matters. Except as set forth in Section 4.11 of the Company Disclosure Letter:

(a) The Company, and to the knowledge of the Company, each of its directors, officers, management employees, agents (while acting in such capacity for the Company), contract manufacturers, suppliers, and distributors (only to the extent each such contract manufacturer, supplier, or distributor is acting for the Company) are, and at all times prior hereto were, in material compliance with all health care laws to the extent applicable to the Company or any of its Company Products or activities, including, but not limited to the following: the Federal Food, Drug & Cosmetic Act ("FDCA"); the Public Health Service Act (42 U.S.C. § 201 et seq.), the Federal Trade Commission Act (15 U.S.C. § 41 et seq.); the Controlled Substances Act (21 U.S.C. § 801 et seq.); the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)); the civil monetary penalties law (42 U.S.C. § 1320a-7a); the civil False Claims Act (31 U.S.C. § 3729 et seq.); the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)); the Stark law (42 U.S.C. § 1395nn); the Criminal Health Care Fraud Statute (18 U.S.C. § 1347); the anti-fraud provisions of the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.) as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. § 17921 et seq.); the exclusion laws (42 U.S.C. § 1320a-7); Medicare (Title XVIII of the Social Security Act); Medicaid (Title XIX of the Social Security Act); and the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 (42 U.S.C. § 18001 et seq.); any regulations promulgated pursuant to such laws; and any other state, federal or ex-U.S. laws, or regulations governing the manufacturing, development, testing, labeling, advertising, marketing or distribution of drug and device products, kickbacks, patient or program charges, recordkeeping, claims process, documentation requirements, medical necessity, referrals, the hiring of employees or acquisition of services or supplies from those who have been excluded from government health care programs, quality, safety, privacy, security, or any other aspect of providing health care, products or services, to the extent applicable to the Company, but in each case excluding Company Privacy Laws ("Health Care Laws"). To the knowledge of the Company, there are no facts or circumstances that reasonably would be expected to give rise to any material liability under any Health Care Laws.

(b) The Company is not a party to any material corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Governmental Entity.

(c) All applications, notifications, submissions, reports and statistical analyses, and other data and conclusions derived therefrom, utilized as the basis for or submitted in connection with any and all requests for a Permit from the U.S. Food and Drug Administration ("FDA") or other Governmental Entity relating to products that are regulated as drugs, medical devices, or other healthcare products under applicable Health Care Laws, including drugs or biological candidates, medical devices, compounds or medical products being researched, tested, stored, developed, labeled, manufactured, packaged, imported, exported and/or distributed by the

Company as applicable ("Company Products"), including, without limitation, investigational new drug applications and investigational device exemptions, when submitted to the FDA or other Governmental Entity were true, complete and correct in all material respects as of the date of submission and any necessary or required updates, changes, corrections or modification to such applications, submissions, or reports have been submitted to the FDA or other Governmental Entity. The Company does not have knowledge of any facts or circumstances that would be reasonably likely to lead the revocation, suspension, limitation, or cancellation of a Permit required under applicable Health Care Laws.

(d) All preclinical studies and clinical trials conducted by or, to the knowledge of the Company, on behalf of the Company in respect of a Company Product for submission to the FDA or other Governmental Entity have been, and if still pending are being, conducted in material compliance with applicable research protocols and all applicable Health Care Laws, including, but not limited to, the FDCA and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58, 312, 314 and 812. No clinical trial conducted by or on behalf of the Company has been conducted using any clinical investigators who have been disqualified by FDA or similar Governmental Entities. No clinical trial conducted by or on behalf of the Company has been terminated or suspended prior to completion due to a safety concern or non-compliance with applicable Health Care Law, and no clinical investigator that has participated or is participating in, or institutional review board that has or has had jurisdiction over, a clinical trial conducted by or on behalf of the Company has placed a clinical hold order on, or otherwise terminated, delayed or suspended, such a clinical trial at a clinical research site based on an actual or alleged lack of safety or efficacy of any Company Product or a failure to conduct such clinical trial in compliance with applicable Health Care Laws.

(e) All manufacturing operations conducted by or, to the knowledge of the Company, for the benefit of the Company have been and are being conducted in material compliance with all Permits under applicable Health Care Laws and all applicable provisions of the FDA's current good manufacturing practice (cGMP) regulations for drug products at 21 C.F.R. Parts 210 and 211, the Quality System (QS) regulations at 21 C.F.R. Part 820 and all comparable foreign regulatory requirements of any Governmental Entity.

(f) The Company has not received any written communication that alleges violation or non-compliance with any Health Care Laws, including any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration, import detention or refusal, FDA Warning Letter or Untitled Letter, or any adverse action by a Governmental Entity relating to any Health Care Laws. All Warning Letters, Form-483 observations, or comparable findings from other Governmental Entities listed in Section 4.11(f) of the Company Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(g) There have been no seizures, withdrawals, recalls, detentions, or suspensions of manufacturing, testing, or distribution relating to the Company Products required or requested by a Governmental Entity, or other notice of adverse action relating to an alleged lack of safety, efficacy, or regulatory compliance of the Company Products or any serious adverse events relating to the Company Products that have been reported to FDA or other Governmental Entity ("Safety Notices"). All Safety Notices listed in Section 4.11(g) of the Company Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(h) Except as set forth in Section 4.11(h) of the Company Disclosure Letter, there are no unresolved Safety Notices, and to the knowledge the Company, there are no facts or circumstances that would be reasonably likely to result in a Safety Notice with respect to the Company Products or a termination or suspension of developing and testing of any of the Company Products.

(i) Neither the Company, nor, to the knowledge of the Company, any officer, employee or agent of the Company has made an untrue statement of a material fact or fraudulent or misleading statement of material fact to a Governmental Entity, failed to disclose a material fact required to be disclosed to a Governmental Entity, or committed an act, made a statement or failed to make a statement that would reasonably be expected to provide a basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and

Illegal Gratuities" Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto (the "FDA Ethics Policy"). None of the aforementioned is or has been under investigation resulting from any allegedly untrue, fraudulent, misleading, or false statement or omission of a material fact, including data fraud, or had any action pending or threatened relating to the FDA Ethics Policy.

(j) All reports, documents, claims, Permits and notices required to be filed, maintained or furnished to the FDA or any Governmental Entity by the Company have been so filed, maintained or furnished, except where failure to file, maintain or furnish such reports, documents, claims, Permits or notices have not had and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. All such reports, documents, claims, Permits and notices were true and complete in all material respects on the date filed (or were corrected in or supplemented by a subsequent filing).

(k) Neither the Company nor, to the knowledge of the Company, any officer, employee, agent, or distributor of the Company has committed any act, made any statement or failed to make any statement that violates the Federal Anti-Kickback Statute, 28 U.S.C. § 1320a-7b, the Federal False Claims Act, 31 U.S.C. § 3729, other Health Care Laws, or any other similar federal, state, or ex-U.S. law applicable in the jurisdictions in which the Company Products are sold or intended to be sold.

(l) Neither the Company nor, to the knowledge of the Company, any officer, employee, agent, or distributor of the Company has been convicted of any crime or engaged in any prohibited conduct that has resulted, or would reasonably be expected to result, in debarment under applicable Law, including, without limitation, 21 U.S.C. § 335a, or exclusion under 42 U.S.C. § 1320a-7, or any other statutory provision or similar Law applicable in other jurisdictions in which the Company Products are sold or intended to be sold. Neither the Company nor, to the knowledge of the Company, any officer, employee, agent or distributor of the Company, has been excluded from participation in any federal health care program or convicted of any crime or engaged in any conduct for which such Person could be excluded from participating in any federal health care program under Section 1128 of the Social Security Act of 1935, as amended, or any similar Health Care Law or program.

Section 4.12 Benefit Plans.

(a) "Company Plans" means each "employee benefit plan" (within the meaning of section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), whether or not subject to ERISA), "multiemployer plans" (within the meaning of ERISA section 3(37)), and all stock purchase, stock option, phantom stock or other equity-based plan, severance, employment, collective bargaining, change-in-control, fringe benefit, bonus, incentive, deferred compensation, supplemental retirement, health, life, or disability insurance, dependent care, employee loans, vacation and all other employee benefit and compensation plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA (including any funding mechanism therefor now in effect or required in the future as a result of the transactions contemplated by this Agreement or otherwise), whether formal or informal, written or oral, sponsored, maintained, or contributed to (or required to be contributed to), by the Company for the benefit of any current or former employee or other individual service provider of the Company (or such employee or other individual service provider's dependents) or with respect to which the Company has any present or future liability or obligation (contingent or otherwise) or with respect to which it is otherwise bound. Section 4.12(a) of the Company Disclosure Letter contains a true and complete list of each material Company Plan. The Company has provided or made available to Parent a current, accurate and complete copy of each material Company Plan, or if such material Company Plan is not in written form, a written summary of all of the material terms of such material Company Plan. With respect to each Company Plan, the Company has furnished or made available to Parent a current, accurate and complete copy of, to the extent applicable: (i) all documents embodying or governing such Company Plan and any related trust agreement or other funding instrument, (ii) the most recent determination letter of the Internal Revenue Service (the "IRS"), (iii) any summary plan description, summary of material modifications, and other similar material written communications (or a written description of any material oral communications) to the employees of the Company concerning the extent of the benefits provided under a Company Plan, (iv) all non-routine

correspondence to and from any governmental agency, and (v) for the three most recent years and as applicable (A) the Form 5500 and attached schedules, (B) audited financial statements, (C) nondiscrimination testing results and (D) actuarial valuation reports.

(b) Neither the Company nor any member of its "Controlled Group" (defined as any organization which is a member of a controlled, affiliated or otherwise related group of entities within the meaning of Sections 414(b), (c), (m) or (o) of the Code) has ever sponsored, maintained, contributed to or been required to contribute to or incurred any liability (contingent or otherwise) with respect to: (i) a "multiemployer plan" (within the meaning of ERISA section 3(37)), (ii) an "employee pension benefit plan," within the meaning of Section 3(2) of ERISA ("Pension Plan") that is subject to Title IV of ERISA or Section 412 of the Code, (iii) a Pension Plan which is a "multiple employer plan" as defined in Section 413 of the Code, or (iv) a "funded welfare plan" within the meaning of Section 419 of the Code.

(c) With respect to the Company Plans:

(i) each Company Plan complies in all material respects with its terms and materially complies in form and in operation with the applicable provisions of ERISA and the Code and all other applicable legal requirements;

(ii) each Company Plan intended to be qualified under Section 401(a) of the Code has received a favorable determination, advisory and/or opinion letter, as applicable, from the IRS that it is so qualified and nothing has occurred to the knowledge of the Company since the date of such letter that would reasonably be expected to cause the loss of the sponsor's ability to rely upon such letter, and nothing has occurred to the knowledge of the Company that would reasonably be expected to result in the loss of the qualified status of such Company Plan;

(iii) there is no material Action (including any investigation, audit or other administrative proceeding) by the Department of Labor, the Pension Benefit Guaranty Corporation (the "PBGC"), the IRS or any other Governmental Entity or by any plan participant or beneficiary pending, or to the knowledge of the Company, threatened, relating to the Company Plans, any fiduciaries thereof with respect to their duties to the Company Plans or the assets of any of the trusts under any of the Company Plans (other than routine claims for benefits);

(iv) none of the Company Plans currently provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by Section 601, *et seq.* of ERISA and Section 4980B(b) of the Code or other applicable similar law regarding health care coverage continuation (collectively "COBRA"), and none of the Company or any members of its Controlled Group has any liability to provide post-termination or retiree welfare benefits to any person or ever represented, promised or contracted to any employee or former employee of the Company (either individually or to Company employees as a group) or any other person that such employee(s) or other person would be provided with post-termination or retiree welfare benefits, except to the extent required by statute or except with respect to a contractual obligation to reimburse any premiums such person may pay in order to obtain health coverage under COBRA;

(v) each Company Plan is subject exclusively to United States Law; and

(vi) the execution and delivery of this Agreement, the Company Stockholder Approval, and the consummation of the Merger will not, either alone or in combination with any other event, (A) entitle any current or former employee, officer, director or consultant of the Company to severance pay, unemployment compensation or any other similar termination payment, or (B) accelerate the time of payment or vesting, or increase the amount of or otherwise enhance any benefit due any such employee, officer, director or consultant.

(d) The Company is not a party to any agreement, contract, arrangement or plan (including any Company Plan) that may reasonably be expected to result, separately or in the aggregate, in connection with the transactions contemplated by this Agreement (either alone or in combination with any other events), in the payment of any "parachute payments" within the meaning of Section 280G of the Code. There is no agreement, plan or other arrangement to which the Company is a party or by which the Company is otherwise bound to compensate any person in respect of Taxes or other liabilities incurred with respect to Section 409A or 4999 of the Code.

(e) Each Company Plan that is a "nonqualified deferred compensation plan" within the meaning of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) complies in both form and operation in all material respects with the requirements of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) and all applicable IRS guidance issued with respect thereto (and has so complied for the entire period during which Section 409A of the Code has applied to such Company Plan) so that no amount paid or payable pursuant to any such Company Plan is subject to any additional Tax or interest under Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law).

(f) No Company Plan provides major medical health or long-term disability benefits that are not fully insured through an insurance contract.

Section 4.13 Labor and Employment Matters.

(a) The Company is, and for the three (3) years immediately preceding the date hereof has been, in compliance in all material respects with all applicable Laws relating to labor and employment, including those relating to employment practices, terms and conditions of employment, collective bargaining, disability, immigration, health and safety, wages, hours and benefits, non-discrimination in employment, workers' compensation, the collection and payment of withholding and/or payroll Taxes and similar Taxes, unemployment compensation, equal employment opportunity, discrimination, harassment, employee and contractor classification, information privacy and security, and continuation coverage with respect to group health plans. For the last three (3) years immediately preceding the date hereof, there has not been, and as of the date of this Agreement there is not pending or, to the knowledge of the Company, threatened, any labor dispute, work stoppage, labor strike or lockout against the Company by employees.

(b) No employee of the Company is covered by an effective or pending collective bargaining agreement or similar labor agreement. To the knowledge of the Company, there has not been any activity on behalf of any labor union, labor organization or similar employee group to organize any employees of the Company. Except as would not be material, there are no (i) unfair labor practice charges or complaints against the Company pending before the National Labor Relations Board or any other labor relations tribunal or authority and to the knowledge of the Company no such representations, claims or petitions are threatened, (ii) representations, claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against the Company that arose out of or under any collective bargaining agreement.

(c) To the knowledge of the Company, no current officer of the Company intends, or is expected, to terminate such individual's employment relationship with such entity in connection with or as a result of the transactions contemplated hereby.

(d) For the three (3) years immediately preceding the date hereof, (i) the Company has not effectuated a "plant closing" (as defined in the Worker Adjustment Retraining and Notification Act of 1988, as amended (the "WARN Act")) affecting any site of employment or one or more facilities or operating units within any site of employment or facility, (ii) there has not occurred a "mass layoff" (as defined in the WARN Act) in connection with the Company affecting any site of employment or one or more facilities or operating units within any site of

employment or facility and (iii) the Company has not engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state, local or foreign law. Except as would not be material, the Company currently properly classifies and, for the last three (3) years immediately preceding the date hereof has properly classified (i) its employees as exempt or non-exempt in accordance with applicable overtime laws, and (ii) its independent contractors in accordance with applicable Law.

(e) Except as set forth on Section 4.13(e) of the Company Disclosure Letter, with respect to any current employee, or officer of the Company, there have been no Actions against the Company pending, or to the Company's knowledge, threatened to be brought or filed, in connection with the employment or engagement of any current employee or officer of the Company, including, without limitation, any claim relating to employment discrimination, harassment, retaliation, equal pay, employment classification or any other employment related matter arising under applicable Laws, except where such action would not, individually or in the aggregate, result in the Company incurring a material liability.

(f) Except as set forth on Section 4.13(f) of the Company Disclosure Letter or with respect to any Company Plan (which subject is addressed in Section 4.12 above), the execution of this Agreement and the consummation of the transactions set forth in or contemplated by this Agreement will not result in any breach or violation of, or cause any payment to be made under, any applicable Laws respecting labor and employment or any collective bargaining agreement to which the Company is a party.

(g) For the three (3) years immediately preceding the date hereof, (i) other than non-material concerns raised in the ordinary course of business, no allegations of workplace sexual harassment, discrimination or other misconduct have been made, initiated, filed or, to the knowledge of the Company, threatened against the Company or any of their respective current directors, officers or senior level management employees, (ii) to the knowledge of the Company, no incidents of any such workplace sexual harassment, discrimination or other misconduct have occurred, and (iii) the Company has not entered into any settlement agreement for which outstanding obligations remain related to allegations of sexual harassment, discrimination or other misconduct by any of their directors or officers described in clause (i) hereof.

(h) The Company is and has at all relevant times been in compliance with (i) COVID-19 related Laws, standards, regulations, orders and guidance (including without limitation relating to business reopening), including those issued and enforced by the Occupational Safety and Health Administration, the Centers for Disease Control, the Equal Employment Opportunity Commission, and any other Governmental Entity; and (ii) the Families First Coronavirus Response Act (including with respect to eligibility for tax credits under such Act) and any other applicable COVID-19 related leave Law, whether state, local or otherwise.

Section 4.14 Environmental Matters.

(a) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect, (i) the Company has conducted their respective businesses in compliance with all, and have not violated any, applicable Environmental Laws; (ii) the Company has obtained all Permits of all Governmental Entities and any other Person that are required under any Environmental Law; (iii) there has been no release of any Hazardous Substance by the Company or any other Person in any manner that has given or would reasonably be expected to give rise to any remedial or investigative obligation, corrective action requirement or liability of the Company under applicable Environmental Laws; (iv) the Company has not received any claims, notices, demand letters or requests for information (except for such claims, notices, demand letters or requests for information the subject matter of which has been resolved prior to the date of this Agreement) from any federal, state, local, foreign or provincial Governmental Entity or any other Person asserting that the Company is in violation of, or liable under, any Environmental Law; (v) no Hazardous Substance has been disposed of, arranged to be disposed of, released or transported in violation of any applicable Environmental Law, or in a manner that has given rise to, or that would reasonably be expected to give rise to, any liability under any Environmental Law, in each case, on, at, under or from any current or former properties or

facilities owned or operated by the Company or as a result of any operations or activities of the Company at any location and, to the knowledge of the Company, Hazardous Substances are not otherwise present at or about any such properties or facilities in amount or condition that has resulted in or would reasonably be expected to result in liability to the Company under any Environmental Law; and (vi) the Company nor any of its properties or facilities are subject to, or are threatened to become subject to, any liabilities relating to any suit, settlement, court order, administrative order, regulatory requirement, judgment or claim asserted or arising under any Environmental Law or any agreement relating to environmental liabilities.

(b) As used herein, "Environmental Law" means any Law relating to (i) the protection, preservation or restoration of the environment (including air, surface water, groundwater, drinking water supply, surface and subsurface soils and strata, wetlands, plant and animal life or any other natural resource) or (ii) the exposure to, or the use, storage, recycling, treatment, generation, transportation, processing, handling, labeling, production, release or disposal of Hazardous Substances.

(c) As used herein, "Hazardous Substance" means any substance listed, defined, designated, classified or regulated as a waste, pollutant or contaminant or as hazardous, toxic, radioactive or dangerous or any other term of similar import under any Environmental Law, including but not limited to petroleum.

Section 4.15 Taxes.

(a) The Company has (i) filed all material income and other material Tax Returns required to be filed by or on behalf of it (taking into account any applicable extensions thereof) and all such Tax Returns are true, accurate and complete in all material respects; and (ii) paid in full (or caused to be paid in full) all material Taxes that are required to be paid by or with respect to it, whether or not such Taxes were shown as due on such Tax Returns.

(b) All material Taxes not yet due and payable by the Company as of the date of the Company Balance Sheet have been, in all respects, properly accrued in accordance with GAAP on the Company Financial Statements, and such Company Financial Statements reflect an adequate reserve (in accordance with GAAP) for all material Taxes accrued but unpaid by the Company through the date of such financial statements. Since the date of the Company Financial Statements, the Company has not incurred, individually or in the aggregate, any material liability for Taxes outside the ordinary course of business consistent with past practice.

(c) The Company has not executed any waiver of any statute of limitations on, or extended the period for the assessment or collection of, any amount of Tax, in each case that has not since expired.

(d) No material audits or other investigations, proceedings, claims, assessments or examinations by any Governmental Entity (each, a "Tax Action") with respect to Taxes or any Tax Return of the Company are presently in progress or have been asserted, threatened or proposed in writing and to the knowledge of the Company, no such Tax Action is being contemplated. No deficiencies or claims for a material amount of Taxes have been claimed, proposed, assessed or asserted in writing against the Company by a Governmental Entity, other than any such claim, proposal, assessment or assertion that has been satisfied by payment in full, settled or withdrawn.

(e) Subject to exceptions as would not be material, the Company has timely withheld all Taxes required to have been withheld from payments made (or deemed made) to its employees, independent contractors, creditors, shareholders and other third parties and, to the extent required, such Taxes have been timely paid to the relevant Governmental Entity.

(f) The Company has not engaged in a "listed transaction" as set forth in Treasury Regulations § 1.6011-4(b)(2).

(g) The Company (i) is not a party to or bound by, or has any liability pursuant to, any Tax sharing, allocation, indemnification or similar agreement or obligation, other than any such agreement or obligation which is a customary commercial agreement obligation entered into in the ordinary course of business with vendors, lessors, lenders or the like the primary purpose of which is unrelated to Taxes (each, an "Ordinary Course Agreement"); (ii) has never been a member of a group (other than a group the common parent of which is the Company) filing a consolidated, combined, affiliated, unitary or similar income Tax Return; (iii) has no liability for the Taxes of any Person (other than the Company) pursuant to Treasury Regulations § 1.1502-6 (or any similar provision of state, local or non-United States Law) as a transferee or successor, by Contract (other than any Ordinary Course Agreement) or otherwise by operation of Law; or (iv) is not or has not been treated as a resident for any income Tax purpose, or as subject to Tax by virtue of having a permanent establishment, an office or fixed place of business, in any country other than the country in which it was or is organized.

(h) No private letter rulings, technical advice memoranda, or similar material agreements or rulings have been requested, entered into or issued by any Governmental Entity with respect to the Company which rulings remain in effect.

(i) The Company will not be required to include any material amount of income in, or exclude any material amount of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of (i) a change in, or use of improper, method of accounting requested or initiated on or prior to the Closing Date, (ii) a "closing agreement" as described in Section 7121 of the Code (or any similar provision of Law) executed on or prior to the Closing Date, (iii) an installment sale or open transaction disposition made on or prior to the Closing Date, (iv) any prepaid amount received or deferred revenue accrued on or prior to the Closing Date, other than in respect of such amounts reflected in the Company Balance Sheet or received in the ordinary course of business since the date of the Company Balance Sheet (v) to the Company's knowledge, an intercompany transaction or excess loss amount described in Treasury Regulations under Section 1502 of the Code (or any corresponding or similar provision of state, local or foreign income Tax Law) or (vi) an election under Section 965 of the Code, or (vii) the application of Sections 951 or 951A of the Code with respect to income earned or recognized or payments received prior to the Closing.

(j) There are no liens for Taxes upon any of the assets of the Company other than Liens described in clause (i) of the definition of Permitted Liens.

(k) The Company has not distributed stock of another Person or has had its stock distributed by another Person, in a transaction (or series of transactions) that was purported or intended to be governed in whole or in part by Sections 355 or 361 of the Code.

(l) The Company has not been a United States real property holding corporation, as defined in Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(m) No material claim has been made in writing by any Governmental Entity in a jurisdiction where the Company does not currently file a Tax Return of a certain type or pay Taxes of a certain type that the Company is or may be subject to taxation by such jurisdiction of such type.

(n) There are no outstanding shares of company stock issued in connection with the performance of services (within the meaning of Section 83 of the Code) for which a valid election under Section 83(b) of the Code has not been made.

(o) To the Company's knowledge, the Company has not been, is not, and immediately prior to the Effective Time will not be, treated as an "investment company" within the meaning of Section 368(a)(2)(F) of the Code.

(p) The Company has not taken, or failed to take, any action nor knows of any fact or circumstance that would reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment.

For purposes of this Section 4.15, where the context permits, each reference to the Company shall include a reference to any person for whose Taxes the Company is liable under applicable Law.

Section 4.16 Contracts.

(a) Section 4.16(a) of the Company Disclosure Letter sets forth each contract that, as of the date of this Agreement, that would constitute a "material contract" (as such term is defined in Item 601(b)(10) of Regulation S-K under the Securities Act), with respect to the Company (assuming the Company were subject to the requirements of the Exchange Act) (all such contracts, in addition to those set forth in Section 4.16(b) of the Company Disclosure Letter, but excluding any Company Plans, "Material Contracts").

(b) Section 4.16(b) of the Company Disclosure Letter lists the following contracts, in effect as of the date of this Agreement, which involve payment or receipt by the Company in excess of $1,000,000 in the aggregate, which for the purposes of this Agreement shall be considered Material Contracts:

(i) each Contract relating to any agreement of indemnification or guaranty not entered into in the ordinary course of business;

(ii) each Contract containing (A) any covenant limiting the freedom of the Company or the Surviving Company to engage in any line of business or compete with any Person, or limiting the development, manufacture or distribution of the Surviving Company's products or services, (B) any most-favored pricing arrangement, (C) any exclusivity provision in favor of a third party, or (D) any non-solicitation provision applicable to the Company, in the case of the foregoing clause (D), which are material to the Company, taken as a whole;

(iii) each Contract relating to capital expenditures and requiring payments after the date of this Agreement pursuant to its express terms and not cancelable without penalty;

(iv) each Contract relating to the disposition or acquisition of material assets or any ownership interest in any Person;

(v) each Contract relating to any mortgages, indentures, loans, notes or credit agreements, security agreements or other agreements or instruments relating to the borrowing of money or extension of credit or creating any material Liens with respect to any assets of the Company or any loans or debt obligations with officers or directors of the Company;

(vi) (A) any Contract involving supply or distribution (identifying any that contain exclusivity provisions), (B) any Contract involving provision of services or products with respect to any pre-clinical or clinical development activities of the Company, (C) any Contract involving a dealer, distributor, joint marketing, alliance, joint venture, cooperation, development or other Contract currently in force under which the Company has continuing obligations to develop or market any product, technology or service, or any Contract pursuant to which the Company has continuing obligations to develop any Intellectual Property that will not be owned, in whole or in part, by the Company or (D) any Contract to license any patent, trademark registration, service mark registration, trade name or copyright registration to or from any third party to manufacture or produce any product, service or technology of the Company or any Contract to sell, distribute or commercialize any products or service of the Company, in each case, except for Contracts entered into in the ordinary course of business;

(vii) each Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to the Company in connection with the transactions contemplated hereby;

(viii) each Contract relating to leases of real properties with respect to which the Company directly or indirectly holds a valid leasehold interest as well as any other real estate that is in the possession of or leased by the Company; and

(ix) any other Contract that is not terminable at will (with no penalty or payment) by the Company, and that is material to the business or operations of the Company.

(c) (i) Each Material Contract is valid and binding on the Company, and to the knowledge of the Company, each other party thereto, and is in full force and effect and enforceable in accordance with its terms; and (ii) as of the date of this Agreement, the Company has not receive any written notice of any material default under any Material Contract by the Company or of any event or condition that has occurred that constitutes, or, after notice or lapse of time or both, would constitute, a material default on the part of the Company. The Company has made available to Parent true and complete copies of all Material Contracts, including all amendments thereto. Except as set forth in Section 4.16 of the Company Disclosure Letter, there are no Company Material Contracts that are not in written form.

Section 4.17 Insurance. The Company is covered by valid and currently effective insurance policies issued in favor of the Company that are customary and adequate for companies of similar size in the industries and locations in which the Company operates. The Company has made available true and complete copies of all material insurance policies issued in favor of the Company, or pursuant to which the Company is a named insured or otherwise a beneficiary, as well as any historic incurrence-based policies still in force. With respect to each such insurance policy, (a) such policy is in full force and effect and all premiums due thereon have been paid, (b) as of the date of this Agreement, the Company has not received written notice that it is in breach or default, or that it has not taken any action or failed to take any action which (with or without notice or lapse of time, or both) would constitute such a breach or default, or would permit termination or modification of, any such policy and (c) to the knowledge of the Company, no insurer issuing any such policy has been declared insolvent or placed in receivership, conservatorship or liquidation. To the knowledge of the Company, no cancellation or termination of any such policy will result from the consummation of the transactions contemplated hereby.

Section 4.18 Properties.

(a) The Company has good and valid title to, or in the case of leased property and leased tangible assets, a valid leasehold interest in, all of its real properties and tangible assets that are necessary for the Company to conduct their respective businesses as currently conducted, free and clear of all Liens other than (i) Liens for Taxes and assessments not yet delinquent or the amount or validity of which is being contested in good faith by appropriate proceedings, (ii) mechanics', workmen's, repairmen's, warehousemen's and carriers' Liens arising in the ordinary course of business of the Company consistent with past practice and (iii) any such matters of record, Liens and other imperfections of title that do not, individually or in the aggregate, materially impair the continued ownership, use and operation of the assets to which they relate in the business of the Company as currently conducted ("Permitted Liens"). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, the tangible personal property currently used in the operation of the business of the Company is in good working order (reasonable wear and tear excepted).

(b) The Company is in compliance with the terms of all leases to which it is a party, and all such leases are in full force and effect, except for any such noncompliance or failure to be in full force and effect that, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect. The Company enjoys peaceful and undisturbed possession under all such leases, except for any such failure to do so that, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect.

(c) Section 4.18(c) of the Company Disclosure Letter sets forth a true and complete list of (i) all real property owned by the Company and (ii) all real property leased for the benefit of the Company.

(d) This Section 4.18 does not relate to intellectual property, which is the subject of Section 4.19.

Section 4.19 Intellectual Property.

(a) Section 4.19(a) of the Company Disclosure Letter sets forth a true and complete list of all of the following that are owned by or licensed to the Company: (i) material patents and patent applications; (ii) material trademark registrations and applications; (iii) material copyright registrations and applications, in each case owned by the Company ((i)-(iii), collectively, "Material Company Registered IP") and (iv) a true and complete list of all domain names. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect (A) all of the Material Company Registered IP owned by the Company, and with respect to Material Company Registered IP not owned by the Company, to the actual knowledge of the Company, is subsisting, (B) any Material Company Registered IP that is registered or issued is, to the knowledge of the Company, valid and enforceable, (C) as of the date of this Agreement, Company has not received written notice that (x) any such Material Company Registered IP is involved in any interference, reissue, derivation, reexamination, opposition, cancellation or similar proceeding contesting the validity, enforceability, claim construction, ownership or right to use, sell, offer for sale, license or dispose of any Material Company Registered IP, or (y) any such action is threatened with respect to any of the Material Company Registered IP and (D) all Material Company Registered IP owned by the Company is owned exclusively by the Company, free and clear of any and all Liens (other than Permitted Liens), and any Material Company Registered IP not owned by the Company is, to the knowledge of the Company, free and clear of any and all Liens (other than Permitted Liens).

(b) Section 4.19(b) of the Company Disclosure Letter accurately identifies (i) all contracts pursuant to which any material Intellectual Property is licensed to the Company (other than (A) any generally commercially available software and Intellectual Property associated with such software, in each case that is licensed on a non-exclusive basis to the Company, (B) any Intellectual Property licensed on a nonexclusive basis ancillary to the purchase or use of equipment, reagents or other materials, (C) any confidential information provided under confidentiality agreements and (D) agreements between Company and its employees in Company's standard form thereof).

(c) Section 4.19(c) of the Company Disclosure Letter accurately identifies each Company contract pursuant to which any Person has been granted any license (or option to license) or covenant not to sue under, or otherwise has received or acquired any right or interest in, any Material Company Registered IP (other than (i) any confidential information provided under confidentiality agreements and (ii) any Material Company Registered IP licensed to academic collaborators, suppliers or service providers for the sole purpose of enabling such academic collaborator, supplier or service providers to provide services for Company's benefit).

(d) To the knowledge of Company, the Company Registered IP constitutes all Intellectual Property necessary for Company to conduct its business as currently conducted; provided, however, that the foregoing representation is not a representation with respect to non- infringement of Intellectual Property.

(e) The Company has taken commercially reasonable measures to maintain the confidentiality of all information that constitutes or constituted a material Trade Secret of the Company, including requiring all Persons having access thereto to execute written non-disclosure agreements or other binding obligations to maintain confidentiality of such information.

(f) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect, (i) to the knowledge of the Company, the conduct of the businesses of the Company, including the manufacture, marketing, offering for sale, sale, importation, use or intended use or other disposal of any product as currently sold or under development by Company, has not infringed, misappropriated or diluted, and does not infringe, misappropriate or dilute, any Intellectual Property of any Person, (ii) the Company has not received any written notice or claim asserting or suggesting that such infringement, misappropriation, or dilution is or may be occurring or has or may have occurred, and (iii) to the knowledge of the Company, no Person is infringing, misappropriating, or diluting in any material respect any Company Registered IP.

(g) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect, in the three (3) years immediately preceding the date hereof: (i) the Company has taken commercially reasonable steps designed to protect the confidentiality and security of the computer and information technology systems used by the Company (the "IT Systems") and the information stored or contained therein or transmitted thereby and (ii) to the knowledge of the Company, there has been no unauthorized or improper use, loss, access, or transmittal, of such information in the possession or control of the Company.

(h) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Material Adverse Effect, in the three (3) years immediately preceding the date hereof: (i) to the knowledge of the Company, the Company has complied in all material respects with all Laws relating to privacy and data protection applicable to the collection, retention, protection, and use of information that alone or in combination with other information can be used to identify an individual ("Personal Information") by the Company (collectively, "Company Privacy Laws"), (ii) no claims by or before any Governmental Entity have been asserted or, to the knowledge of the Company, have been threatened in writing against the Company alleging a violation of any applicable Company Privacy Laws, and (iii) neither this Agreement nor the consummation of the transactions contemplated hereby will breach or otherwise violate any applicable Company Privacy Laws; and (iv) the Company has taken commercially reasonable steps designed to protect any Personal Information collected, retained or used by the Company against unauthorized or improper use, loss, access, or transmittal.

(i) To the knowledge of the Company, no government funding, facilities or resources of a university, college, other educational institution or research center or funding from third parties was used in the development of the Material Company Registered IP, and no Governmental Entity, university, college, other educational institution or research center has, to the knowledge of the Company, any claim or right in or to the Material Company Registered IP.

(j) Except as set forth on Section 4.19(j) of the Company Disclosure Letter, the execution, delivery and performance by the Company of this Agreement, and the consummation of the transactions contemplated hereby, will not result in the loss of, or give rise to any right of any third party to terminate or modify any of the rights or obligations of the Company under any agreement under which the Company grants to any Person, or any Person grants to the Company, a license or right under or with respect to any Intellectual Property that is material to any of the businesses of the Company, including any of the agreements listed in Section 4.19(b) or Section 4.19(c) of the Company Disclosure Letter.

Section 4.20 State Takeover Statutes. As of the date hereof and at all times on or prior to the Effective Time, the Company Board has taken all actions so that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and the timely consummation of the Merger and the other transactions contemplated hereby and will not restrict, impair or delay the ability of Parent or Merger Sub, after the Effective Time, to vote or otherwise exercise all rights as a stockholder of the Surviving Company. No other "moratorium," "fair price," "business combination," "control share acquisition" or similar provision of any state anti-takeover Law (collectively, "Takeover Laws") or any similar anti-takeover provision in the Company Charter or Company Bylaws is, or at the Effective Time will be, applicable to this Agreement, the Merger or any of the other transactions contemplated hereby.

Section 4.21 No Rights Plan. There is no stockholder rights plan, "poison pill" anti- takeover plan or other similar device in effect to which the Company is a party or is otherwise bound.

Section 4.22 Related Party Transactions. Except as set forth on Section 4.22 of the Company Disclosure Letter, since October 1, 2020 through the date of this Agreement, there have been no transactions, agreements, arrangements or understandings between the Company, on the one hand, and the Affiliates of the Company, on

the other hand that would be required to be disclosed under Item 404 of Regulation S-K under the Securities Act (assuming the Company were subject to the requirements of the Exchange Act).

Section 4.23 Certain Payments. Neither the Company nor, to the knowledge of the Company, any of its directors, executives, representatives, agents or employees (a) has used or is using any corporate funds for any illegal contributions, gifts, entertainment or other unlawful expenses relating to political activity, (b) has used or is using any corporate funds for any direct or indirect unlawful payments to any foreign or domestic governmental officials or employees, (c) has violated or is violating any provision of the Foreign Corrupt Practices Act of 1977, as amended, (d) has established or maintained, or is maintaining, any unlawful fund of corporate monies or other properties, or (e) has made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment of any nature.

Section 4.24 Brokers. No broker, investment banker, financial advisor or other Person, other than as set forth on Section 4.24 of the Company Disclosure Letter, the fees and expenses of which will be paid by the Company, or following the Effective Time, Parent is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of the Company or any of its Affiliates. The Company has furnished to Parent a true and complete copy of any Contract between the Company and any Person identified on Section 4.24 of the Company Disclosure Letter pursuant to which such Person could be entitled to any payment from the Company relating to the transactions contemplated hereby.

Section 4.25 Subscription Agreement. To the knowledge of the Company, the Subscription Agreement has not been amended or modified in any manner prior to the date of this Agreement. Neither the Company nor, to the knowledge of the Company, its Affiliates has entered into any agreement, side letter or other arrangement relating to the Concurrent PIPE Investment other than as set forth in the Subscription Agreement. To the knowledge of the Company, the respective obligations and agreements contained in the Subscription Agreement have not been withdrawn or rescinded in any respect. To the knowledge of the Company, the Subscription Agreement is in full force and effect and represents a valid, binding and enforceable obligation of each party thereto (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity). To the knowledge of the Company, no event has occurred which, with or without notice, lapse of time or both, would constitute a breach or default under the Subscription Agreement on the part of any party thereto. To the knowledge of the Company, no party thereto will be unable to satisfy on a timely basis any term of the Subscription Agreement. There are no conditions precedent related to the consummation of the Concurrent PIPE Investment contemplated by the Subscription Agreement, other than the satisfaction or waiver of the conditions expressly set forth in Section 6 of the Subscription Agreement. To the knowledge of the Company, the proceeds of the Concurrent PIPE Investment will be made available to the Surviving Company immediately following the consummation of the Merger.

Section 4.26 No Other Representations and Warranties. Except for the representations and warranties contained in Article V, the Company acknowledges and agrees that none of Parent, Merger Sub or any other Person on behalf of Parent or Merger Sub makes any other express or implied representation or warranty whatsoever, and specifically (but without limiting the generality of the foregoing) that none of Parent, its Subsidiaries or any other Person on behalf of Parent or Merger Sub makes any representation or warranty with respect to any projections or forecasts delivered or made available to the Company or any of its Representatives of future revenues, results of operations (or any component thereof), cash flows or financial condition (or any component thereof) of Parent (including any such projections or forecasts made available to the Company and Representatives in certain "data rooms" or management presentations in expectation of the transactions contemplated by this Agreement), and the Company has not relied on any such information or any representation or warranty not set forth in Article V.

ARTICLE V
REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUB

Except (a) as disclosed in the Parent SEC Documents at least three Business Days prior to the date of this Agreement and that is reasonably apparent on the face of such disclosure to be applicable to the representation and warranty set forth herein (other than any disclosures contained or referenced therein under the captions "Risk Factors," "Forward-Looking Statements," "Quantitative and Qualitative Disclosures About Market Risk," and any other disclosures contained or referenced therein of information, factors, or risks that are predictive, cautionary, or forward-looking in nature); or (b) as set forth in the corresponding section or subsection of the disclosure letter delivered by Parent to the Company immediately prior to the execution of this Agreement (the "Parent Disclosure Letter") (it being agreed that the disclosure of any information in a particular section or subsection of the Parent Disclosure Letter shall be deemed disclosure of such information with respect to any other section or subsection of this Agreement to which the relevance of such information is readily apparent on its face), each of Parent and Merger Sub represent and warrant to the Company as follows:

Section 5.1 Organization, Standing and Power.

(a) Each of Parent and Merger Sub is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation. Each of Parent and Merger Sub (x) has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as now being conducted and (y) is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the nature of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except in the case of clause (y), where the failure to be so qualified or licensed or in good standing, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect. For purposes of this Agreement, "Parent Material Adverse Effect" means any event, change, circumstance, occurrence, effect or state of facts that is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, or results of operations of Parent; provided, however, that Parent Material Adverse Effect shall not include any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from (1) changes or conditions generally affecting the industries in which Parent operates, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or Law or other action by any Governmental Entity in response thereto, (3) changes in Law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of this Agreement, (5) any specific action taken (or omitted to be taken) by Parent at or with the express written consent of the Company or required by or expressly permitted by the terms of this Agreement, (6) a change in the stock price or trading volume of Parent Common Stock or the suspension of trading in or delisting of Parent's securities on Nasdaq (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded by the other provisions hereof) or (7) any failure to meet internal or other estimates, predictions, projections or forecasts (provided that any facts or circumstances causing such failure may be considered to the extent not otherwise excluded by the other provisions hereof); provided, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts is not disproportionately adverse to Parent, as compared to other participants in the industries in which Parent operates.

(b) Parent has previously made available to the Company true and complete copies of the Certificate of Incorporation and Bylaws of each of Parent and Merger Sub, in each case, as amended to the date of this Agreement, and each as so delivered is in full force and effect. None of Parent or Merger Sub is in violation of any provision of their respective Certificate of Incorporation or Bylaws.

(c) Except with respect to the extent relating to the transactions contemplated by this Agreement or any other strategic alternatives, or in draft form, and except as may be redacted to preserve a privilege (including

attorney-client privilege), Parent has made available to the Company true and complete copies of the minutes of all meetings of Parent's stockholders, the Parent Board, and each committee of the Parent Board held since January 1, 2021.

Section 5.2 Capital Stock.

(a) The authorized capital stock of Parent consists of 300,000,000 shares of Parent Common Stock and 10,000,000 shares of preferred stock, par value $0.00001 per share, of Parent (the "Parent Preferred Stock"). As of the close of business on November 9, 2023 (the "Measurement Date"), (i) 57,996,481 shares of Parent Common Stock (excluding treasury shares) were issued and outstanding, all of which were validly issued, fully paid and nonassessable (which term means that no further sums are required to be paid by the holders thereof in connection with the issue of such shares) and were free of preemptive rights, (ii) no shares of Parent Common Stock were held in treasury, (iii) an aggregate of 5,950,471 shares of Parent Common Stock were subject to the exercise of outstanding options to purchase shares of Parent Common Stock issued pursuant to Parent's 2020 Stock Option and Grant Plan or 2021 Stock Option and Incentive Plan (together, the "Parent Equity Plans") (the "Parent Options"), (iv) no shares of Parent Preferred Stock were issued and outstanding or held in treasury, and (v) an aggregate of 820,307 shares of restricted stock of Parent outstanding that were issued pursuant to the Parent Equity Plans. Except as set forth above in this Section 5.2(a), Parent does not have any outstanding bonds, debentures, notes or other obligations having the right to vote (or convertible into, or exchangeable or exercisable for, securities having the right to vote) with the stockholders of Parent on any matter. Except as set forth above in this Section 5.2(a) and except for changes since the close of business on the Measurement Date resulting from the exercise of any options as described above, as of the Measurement Date, there are no outstanding (A) shares of capital stock or other voting securities or equity interests of Parent, (B) securities of Parent convertible into or exchangeable or exercisable for shares of capital stock of Parent or other voting securities or equity interests of Parent, (C) stock appreciation rights, "phantom" stock rights, performance units, interests in or rights to the ownership or earnings of Parent or other equity equivalent or equity-based awards or rights, (D) subscriptions, options, warrants, calls, commitments, Contracts or other rights to acquire from Parent, or obligations of Parent to issue, any shares of capital stock of Parent, voting securities, equity interests or securities convertible into or exchangeable or exercisable for capital stock or other voting securities or equity interests of Parent or rights or interests described in the preceding clause (C), or (E) obligations of Parent to repurchase, redeem or otherwise acquire any such securities or to issue, grant, deliver or sell, or cause to be issued, granted, delivered or sold, any such securities. There are no stockholder agreements, voting trusts or other agreements or understandings to which Parent is a party or of which Parent has knowledge with respect to the holding, voting, registration, redemption, repurchase or disposition of, or that restricts the transfer of, any capital stock or other voting securities or equity interests of Parent.

(b) Section 5.2(b) of the Parent Disclosure Letter sets forth a correct and complete list of all outstanding Parent Options, including, with respect to each Parent Option: (i) the name of the holder, (ii) number of shares of Parent Common Stock subject to each Parent Option, (iii) the number of such shares that are vested or unvested, (iv) the grant date, (v) the vesting commencement date, (vi) the vesting schedule (and the terms of any acceleration thereof), (vii) the exercise price per share, (viii) whether such Parent Option was designated an "incentive stock option" under Section 422 of the Code, (ix) the post-termination exercise period, and (x) whether such Parent Option was granted with an "early exercise" right in favor of the holder.

(c) The authorized capital stock of Merger Sub consists of 1,000 shares of common stock, par value $0.001 per share, of which 1,000 shares are issued and outstanding, all of which shares are beneficially owned by Parent.

(d) The shares of Parent Common Stock to be issued pursuant to the Merger will be duly authorized, validly issued, fully paid and nonassessable and not subject to any preemptive rights.

Section 5.3 Subsidiaries. Other than Merger Sub, Parent does not own, directly or indirectly, any equity, membership interest, partnership interest, joint venture interest, or other equity or voting interest in, or any

interest convertible into, exercisable or exchangeable for any of the foregoing, nor is it under any current or prospective obligation to form or participate in, provide funds to, make any loan, capital contribution, guarantee, credit enhancement or other investment in, or assume any liability or obligation of, any Person. Merger Sub was formed solely for the purpose of engaging in the Merger and the other transactions contemplated hereby and has engaged in no business other than in connection with the transactions contemplated by this Agreement.

Section 5.4 Authority.

(a) Each of Parent and Merger Sub has all necessary corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the Merger and the other transactions contemplated hereby, including the issuance of the shares of Parent Common Stock to the holders of Company Capital Stock as Merger Consideration (the "Parent Common Stock Issuance"). The execution, delivery and performance of this Agreement by Parent and Merger Sub and the consummation by Parent and Merger Sub of the Merger and the other transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Parent and Merger Sub and no other corporate proceedings on the part of Parent or Merger Sub are necessary to approve and consummate the Merger and the other transactions contemplated hereby, subject to (i) obtaining the approval of the Agreement and the transactions contemplated hereby, including the Merger, the Nasdaq Issuance Proposal, the Equity Plan Proposals and each of the Charter Amendment Proposals, by the holders of a majority of the votes cast for such proposals (collectively, the "Parent Stockholder Approval") and (ii) the approval of this Agreement by Parent as the sole stockholder of Merger Sub. This Agreement has been duly executed and delivered by Parent and Merger Sub and, assuming the due authorization, execution and delivery by the Company, constitutes a valid and binding obligation of each of Parent and Merger Sub, enforceable against each of Parent and Merger Sub in accordance with its terms (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity).

(b) The Parent Board, at a meeting duly called and held at which all directors of Parent were present, duly adopted resolutions (i) determining that the terms of this Agreement, the Merger and the other transactions contemplated hereby are fair to, advisable and in the best interests of Parent and its stockholders, (ii) approving and declaring advisable this Agreement and the transactions contemplated hereby, including the Merger, the issuance of shares of Parent Common Stock to the stockholders of the Company pursuant to the terms of this Agreement, the Concurrent PIPE Investment, the Cash Dividend, and the Parent Support Agreements, (iii) determining to submit the Parent Board Recommendation to the stockholders of Parent, and (iv) determining to approve and recommend the Parent Stockholder Proposals to the stockholders of Parent as promptly as practicable after the forms of the Charter Amendment Proposals are mutually agreed to by Parent and the Company. The board of directors of Merger Sub (by unanimous written consent) has: (x) determined that the transactions contemplated hereby are fair to, advisable, and in the best interests of Merger Sub and its sole stockholder, (y) deemed advisable and approved this Agreement and the transactions contemplated hereby and (z) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholder of Merger Sub vote to adopt this Agreement and thereby the transactions contemplated hereby.

(c) The Parent Stockholder Approval is the only vote of the holders of any class or series of the Parent Common Stock or other securities required in connection with the consummation of the Merger and the other transactions contemplated hereby, including the Parent Common Stock Issuance. Other than the Parent Stockholder Approval, no vote of the holders of any class or series of the Parent Common Stock or other securities is required in connection with the consummation of any of the transactions contemplated hereby to be consummated by Parent.

Section 5.5 No Conflict; Consents and Approvals.

(a) The execution, delivery and performance of this Agreement by each of Parent and Merger Sub does not, and the consummation of the Merger and the other transactions contemplated hereby and compliance by

each of Parent and Merger Sub with the provisions hereof will not, conflict with, or result in any violation or breach of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of, or result in, termination, cancellation, modification or acceleration of any obligation or to the loss of a benefit under, or result in the creation of any Lien in or upon any of the properties, assets or rights of Parent or Merger Sub under, or give rise to any increased, additional, accelerated or guaranteed rights or entitlements under, or require any consent, waiver or approval of any Person pursuant to, any provision of (i) the Certificate of Incorporation or Bylaws of Parent or Merger Sub, (ii) any Contract to which Parent or Merger Sub is a party by which Parent, Merger Sub or any of their respective properties or assets may be bound, or (iii) subject to the governmental filings and other matters referred to in Section 5.5(b), any material Law or any rule or regulation of Nasdaq applicable to Parent or Merger Sub or by which Parent, Merger Sub or any of their respective properties or assets may be bound, except as, in the case of clauses (ii) and (iii), as individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect.

(b) No consent, approval, order or authorization of, or registration, declaration, filing with or notice to, any Governmental Entity is required by or with respect to Parent or Merger Sub in connection with the execution, delivery and performance of this Agreement by Parent or Merger Sub or the consummation by Parent or Merger Sub of the Merger and the other transactions contemplated hereby or compliance with the provisions hereof, except for (i) the filing of the pre- merger notification report under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, (ii) the filing with the SEC of such reports under Section 13(a) or 15(d) of the Exchange Act, as may be required in connection with this Agreement and the transactions contemplated hereby, (iii) such other filings and reports as may be required pursuant to the applicable requirements of the Securities Act, the Exchange Act and any other applicable state or federal securities, takeover and "blue sky" laws, (iv) the filing of the Certificate of Merger with the Delaware Secretary of State as required by the DGCL, (v) any filings required under the rules and regulations of Nasdaq and (vi) such consents, approvals, orders, authorizations, registrations, declarations, filings or notices the failure of which to be obtained or made, individually or in the aggregate, have not had and would not reasonably be expected to be material to Parent.

Section 5.6 SEC Reports; Financial Statements.

(a) Parent has filed with or furnished to the SEC on a timely basis true and complete copies of all forms, reports, schedules, statements and other documents required to be filed with or furnished to the SEC by Parent since January 1, 2023 (all such documents, together with all exhibits and schedules to the foregoing materials and all information incorporated therein by reference, the "Parent SEC Documents"). As of their respective filing dates (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing), the Parent SEC Documents complied in all material respects with the applicable requirements of the Securities Act, the Exchange Act and the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), as the case may be, including, in each case, the rules and regulations promulgated thereunder, and none of the Parent SEC Documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(b) The financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents (i) have been prepared in a manner consistent with the books and records of Parent, (ii) have been prepared in accordance with GAAP (except, in the case of unaudited statements, as permitted by Form 10-Q of the SEC) applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto), (iii) comply as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto and (iv) fairly present in all material respects the consolidated financial position of Parent as of the dates thereof and their respective consolidated results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal and recurring year-end audit adjustments that were not, or are not expected to be, material in amount), all in accordance with GAAP and the applicable rules and regulations promulgated by the SEC. Since January 1, 2023, Parent has not made any change in the accounting practices or policies applied in

the preparation of its financial statements, except as required by GAAP, SEC rule or policy or applicable Law. The books and records of Parent have been, and are being, maintained in all material respects in accordance with GAAP (to the extent applicable) and any other applicable legal and accounting requirements and reflect only actual transactions.

(c) Parent has established and maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Such disclosure controls and procedures are designed to ensure that information relating to Parent required to be disclosed in Parent's periodic and current reports under the Exchange Act, is made known to Parent's principal executive officer and principal financial officer by others within those entities to allow timely decisions regarding required disclosures as required under the Exchange Act. The chief executive officer and principal financial officer of Parent have evaluated the effectiveness of Parent's disclosure controls and procedures and, to the extent required by applicable Law, presented in any applicable Parent SEC Document that is a report on Form 10-K or Form 10-Q, or any amendment thereto, its conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by such report or amendment based on such evaluation.

(d) Parent has established and maintains a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) which is effective in providing reasonable assurance regarding the reliability of Parent's financial reporting and the preparation of Parent's financial statements for external purposes in accordance with GAAP. Parent has disclosed, based on its most recent evaluation of Parent's internal control over financial reporting prior to the date hereof, to Parent's auditors and audit committee (i) any significant deficiencies and material weaknesses in the design or operation of Parent's internal control over financial reporting which are reasonably likely to adversely affect Parent's ability to record, process, summarize and report financial information and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in Parent's internal control over financial reporting. A true, correct and complete summary of any such disclosures made by management to Parent's auditors and audit committee is set forth as Section 5.6(d) of Parent Disclosure Letter.

(e) Since January 1, 2023, (i) neither Parent nor, to the knowledge of Parent, any of its directors, officers, employees, auditors, accountants or representatives has received or otherwise had or obtained knowledge of any material complaint, allegation, assertion or claim, whether written or oral, regarding the accounting or auditing practices, procedures, methodologies or methods of Parent or its internal accounting controls, including any material complaint, allegation, assertion or claim that Parent has engaged in questionable accounting or auditing practices and (ii) no attorney representing Parent, whether or not employed by Parent, has reported evidence of a material violation of securities Laws, breach of fiduciary duty or similar violation by Parent or any of its officers, directors, employees or agents to the Parent Board or any committee thereof or to any director or officer of Parent.

(f) As of the date of this Agreement, there are no outstanding or unresolved comments in the comment letters received from the SEC staff with respect to the Parent SEC Documents. To the knowledge of Parent, none of the Parent SEC Documents is subject to ongoing review or outstanding SEC comment or investigation.

(g) Parent is not a party to, or has any commitment to become a party to, any joint venture, off balance sheet partnership or any similar Contract (including any Contract or arrangement relating to any transaction or relationship between or among Parent, on the one hand, and any unconsolidated Affiliate, including any structured finance, special purpose or limited purpose entity or Person, on the other hand, or any "off balance sheet arrangements" (as defined in Item 303(a) of Regulation S K under the Exchange Act)), where the result, purpose or intended effect of such Contract is to avoid disclosure of any material transaction involving, or material liabilities of, Parent in Parent's published financial statements or other Parent SEC Documents.

(h) Parent is in compliance in all material respects with (i) the provisions of the Sarbanes-Oxley Act and (ii) the rules and regulations of Nasdaq, in each case, that are applicable to Parent.

(i) Parent has not been and is not currently a "shell company" as defined in Section 12b-2 of the Exchange Act.

Section 5.7 No Undisclosed Liabilities. Parent does not have any liabilities or obligations of any nature, whether accrued, absolute, contingent or otherwise, known or unknown, whether due or to become due and whether or not required to be recorded or reflected on a balance sheet under GAAP, except (a) to the extent specifically and adequately accrued or reserved against in the audited balance sheet of Parent as at December 31, 2022 included in the Annual Report on Form 10-K filed by Parent with the SEC on March 20, 2023, as amended by Amendment No. 1 on Form 10-K/A, filed with the SEC on April 27, 2023 (without giving effect to any amendment thereto filed on or after the date hereof) and (b) for liabilities and obligations incurred in the ordinary course of business consistent with past practice (none of which is a liability for a breach or default under any contract, breach of warranty, tort, infringement, misappropriation or violation of law) since December 31, 2022 that are not individually or in the aggregate material to Parent.

Section 5.8 Absence of Certain Changes or Events. Except as set forth in Section 5.8 of the Parent Disclosure Letter, since December 31, 2022, (i) except in connection with the execution of this Agreement and the consummation of the transactions contemplated hereby, Parent has conducted their business only in the ordinary course consistent with past practice; (ii) there has not been any change, event or development or prospective change, event or development that, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect; and (iii) Parent has not:

(a) (i) declared, set aside or paid any dividends on, or made any other distributions (whether in cash, stock or property) in respect of, any of its capital stock or other equity interests, other than the Cash Dividend, (ii) purchased, redeemed or otherwise acquired shares of capital stock or other equity interests of Parent or any options, warrants, or rights to acquire any such shares or other equity interests, or (iii) split, combined, reclassified or otherwise amended the terms of any of its capital stock or other equity interests or issued or authorized the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or other equity interests;

(b) amended or otherwise changed, or authorized or proposed to amend or otherwise changed, its certificate of incorporation or by-laws (or similar organizational documents);

(c) adopted or entered into a plan of complete or partial liquidation, dissolution, restructuring, recapitalization or reorganization; or

(d) changed its financial or Tax accounting methods, principles or practices, except insofar as may have been required by a change in GAAP or applicable Law, or revalued any of its material assets.

Section 5.9 Litigation. There is no Action (or basis therefor) pending or, to the knowledge of Parent, threatened against or affecting Parent, any of its properties or assets, or any present or former officer, director or employee of Parent in such individual's capacity as such, other than any Action that (a) does not involve an amount in controversy in excess of $100,000 and (b) does not seek injunctive or other non-monetary relief. Neither Parent nor any of its properties or assets is subject to any outstanding judgment, order, injunction, rule or decree of any Governmental Entity. There is no Action pending or, to the knowledge of Parent, threatened seeking to prevent, hinder, modify, delay or challenge the Merger or any of the other transactions contemplated by this Agreement.

Section 5.10 Compliance with Law. Parent is and has been in compliance in all material respects with all Laws applicable to its businesses, operations, properties or assets. Parent has not received, since January 1, 2021, a notice or other written communication alleging or relating to a possible material violation of any Law applicable to its business, operations, properties, assets or Parent Products (as defined below). Parent has in effect all material Permits of all Governmental Entities necessary and required for it to own, lease or operate its

properties and assets and to carry on its business and operations as now conducted, and there has occurred no violation of, default (with or without notice or lapse of time or both) under or event giving to others any right of revocation, non-renewal, adverse modification or cancellation of, with or without notice or lapse of time or both, any such Permit, nor would any such revocation, non-renewal, adverse modification or cancellation result from the consummation of the transactions contemplated hereby.

Section 5.11 Health Care Regulatory Matters. Except as set forth in Section 5.11 of the Parent Disclosure Letter:

(a) Parent, and to the knowledge of Parent, each of its directors, officers, management employees, agents (while acting in such capacity for Parent), contract manufacturers, suppliers, and distributors (only to the extent each such contract manufacturer, supplier, or distributor is acting for Parent) are, and at all times prior hereto were, in material compliance with all health care laws to the extent applicable to Parent or any of its products or activities, including, but not limited to the Health Care Laws, to the extent applicable to Parent. To the knowledge of Parent, there are no facts or circumstances that reasonably would be expected to give rise to any material liability under any Health Care Laws.

(b) Parent is not party to any material corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Governmental Entity.

(c) All applications, notifications, submissions, reports and statistical analyses, and other data and conclusions derived therefrom, utilized as the basis for or submitted in connection with any and all requests for a Permit from the FDA or other Governmental Entity relating to products that are regulated as biologics under applicable Health Care Laws, including biological candidates, compounds or products being researched, tested, stored, developed, labeled, manufactured, packed, imported, exported and/or distributed by Parent ("Parent Products"), including, without limitation, investigational new drug applications, when submitted to the FDA or other Governmental Entity were true, complete and correct in all material respects as of the date of submission and any necessary or required updates, changes, corrections or modification to such applications, submissions, or reports have been submitted to the FDA or other Governmental Entity. Parent does not have knowledge of any facts or circumstances that would be reasonably likely to lead the revocation, suspension, limitation, or cancellation of a Permit required under applicable Health Care Laws.

(d) All preclinical studies and clinical trials conducted by or, to the knowledge of Parent, on behalf of Parent in respect of a Parent Product for submission to the FDA or other Governmental Entity have been since January 1, 2018, and if still pending are being, conducted in material compliance with applicable research protocols and all applicable Health Care Laws, including, but not limited to, the FDCA and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58, 312, 314 and 812. No clinical trial conducted by or on behalf of Parent has been conducted using any clinical investigators who have been disqualified by FDA or similar Governmental Entities. Except as set forth on Section 5.11(d) of the Parent Disclosure Letter, no clinical trial conducted by or on behalf of Parent has been terminated or suspended prior to completion due to a safety concern or non-compliance with applicable Health Care Law, and no clinical investigator that has participated or is participating in, or institutional review board that has or has had jurisdiction over, a clinical trial conducted by or on behalf of Parent has placed a clinical hold order on, or otherwise terminated or suspended, such a clinical trial at a clinical research site based on an actual or alleged lack of safety or efficacy of any Parent Product or a failure to conduct such clinical trial in compliance with applicable Health Care Laws.

(e) All manufacturing operations conducted by or, to the knowledge of Parent, for the benefit of Parent have been and are being conducted in material compliance with all Permits under applicable Health Care Laws, all applicable provisions of the FDA's current good manufacturing practice (cGMP) regulations at 21 C.F.R. Parts 210-211 and Parts 600 and 610 and FDA's Quality System (QS) regulations at 21 C.F.R. Part 820, and all comparable foreign regulatory requirements of any Governmental Entity.

(f) Parent has not received any written communication that alleges violation or non-compliance with any Health Care Laws, including any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration, import detention or refusal, FDA Warning Letter or Untitled Letter, or any adverse action by a Governmental Entity relating to any Health Care Laws. All Warning Letters, Form-483 observations, or comparable findings from other Governmental Entities listed in Section 5.11 of the Parent Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(g) There have been no seizures, withdrawals, recalls, detentions, or suspensions of manufacturing, testing, or distribution relating to the Parent Products required or requested by a Governmental Entity, or other Safety Notices. All Safety Notices listed in Section 5.11(g) of the Parent Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(h) Except as set forth in Section 5.11(g) of the Parent Disclosure Letter, there are no unresolved Safety Notices, and to the knowledge Parent, there are no facts or circumstances that would be reasonably likely to result in a Safety Notice with respect to the Parent Products or a termination or suspension of developing and testing of any of the Parent Products.

(i) Neither Parent, nor, to the knowledge of Parent, any officer, employee or agent of Parent has made an untrue statement of a material fact or fraudulent or misleading statement of material fact to a Governmental Entity, failed to disclose a material fact required to be disclosed to a Governmental Entity, or committed an act, made a statement, or failed to make a statement that would reasonably be expected to provide a basis for the FDA to invoke its FDA Ethics Policy. None of the aforementioned is or has been under investigation resulting from any allegedly untrue, fraudulent, misleading, or false statement or omission of a material fact, including data fraud, or had any action pending or threatened relating to the FDA Ethics Policy.

(j) All reports, documents, claims, Permits and notices required to be filed, maintained or furnished to the FDA or any Governmental Entity by Parent have been so filed, maintained or furnished, except where failure to file, maintain or furnish such reports, documents, claims, Permits or notices have not had and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. All such reports, documents, claims, Permits and notices were true and complete in all material respects on the date filed (or were corrected in or supplemented by a subsequent filing).

(k) Neither Parent nor, to the knowledge of Parent, any officer, employee, agent, or distributor of Parent has committed any act, made any statement or failed to make any statement that violates the Federal Anti-Kickback Statute, 28 U.S.C. § 1320a-7b, the Federal False Claims Act, 31 U.S.C. § 3729, other Health Care Laws, or any other similar federal, state, or ex- U.S. law applicable in the jurisdictions in which the Parent Products are sold or intended to be sold.

(l) Neither Parent nor, to the knowledge of Parent, any officer, employee, agent, or distributor of Parent has been convicted of any crime or engaged in any prohibited conduct that has resulted, or would reasonably be expected to result, in debarment under applicable Law, including, without limitation, 21 U.S.C. § 335a, or exclusion under 42 U.S.C. § 1320a-7, or any other statutory provision or similar Law applicable in other jurisdictions in which the Parent Products are sold or intended to be sold. Neither Parent nor, to the knowledge of Parent, any officer, employee, agent or distributor of Parent, has been excluded from participation in any federal health care program or convicted of any crime or engaged in any conduct for which such Person could be excluded from participating in any federal health care program under Section 1128 of the Social Security Act of 1935, as amended, or any similar Health Care Law or program.

Section 5.12 Benefit Plans.

(a) "Parent Plans" means each "employee benefit plan" (within the meaning of section 3(3) of ERISA, whether or not subject to ERISA), "multiemployer plans" (within the meaning of ERISA section 3(37)), and all

stock purchase, stock option, phantom stock or other equity-based plan, severance, employment, collective bargaining, change-in-control, fringe benefit, bonus, incentive, deferred compensation, supplemental retirement, health, life, or disability insurance, dependent care, employee loans, vacation and all other employee benefit and compensation plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA (including any funding mechanism therefor now in effect or required in the future as a result of the transactions contemplated by this Agreement or otherwise), whether formal or informal, written or oral, sponsored, maintained, or contributed to (or required to be contributed to), by the Parent for the benefit of any current or former employee, or other individual service provider of Parent (or such employee or other individual service provider's dependents) or with respect to which the Parent has any present or future liability or obligation (contingent or otherwise) or with respect to which it is otherwise bound. Section 5.12(a) of the Parent Disclosure Letter contains a true and complete list of each material Parent Plan. Parent has provided or made available to the Company a current, accurate and complete copy of each material Parent Plan, or if such material Parent Plan is not in written form, a written summary of all of the material terms of such material Parent Plan. With respect to each Parent Plan, Parent has furnished or made available to the Company a current, accurate and complete copy of, to the extent applicable: (i) all documents embodying or governing such Parent Plan and any related trust agreement or other funding instrument, (ii) the most recent determination letter of the IRS, (iii) any summary plan description, summary of material modifications, and other similar material written communications (or a written description of any material oral communications) to the employees of Parent concerning the extent of the benefits provided under a Parent Plan, (iv) all non-routine correspondence to and from any governmental agency, and (v) for the three most recent years and as applicable (A) the Form 5500 and attached schedules, (B) audited financial statements (C) nondiscrimination testing results and (D) actuarial valuation reports.

(b) Neither Parent nor any member of its Controlled Group has ever sponsored, maintained, contributed to or been required to contribute to or incurred any liability (contingent or otherwise) with respect to: (i) a "multiemployer plan" (within the meaning of ERISA section 3(37)), (ii) a Pension Plan that is subject to Title IV of ERISA or Section 412 of the Code, (iii) a Pension Plan which is a "multiple employer plan" as defined in Section 413 of the Code, or (iv) a "funded welfare plan" within the meaning of Section 419 of the Code.

(c) With respect to the Parent Plans:

(i) each Parent Plan complies in all material respects with its terms and materially complies in form and in operation with the applicable provisions of ERISA and the Code and all other applicable legal requirements;

(ii) each Parent Plan intended to be qualified under Section 401(a) of the Code has received a favorable determination, advisory and/or opinion letter, as applicable, from the IRS that it is so qualified and nothing has occurred to the knowledge of Parent since the date of such letter that would reasonably be expected to cause the loss of the sponsor's ability to rely upon such letter, and nothing has occurred to the knowledge of Parent that would reasonably be expected to result in the loss of the qualified status of such Parent Plan;

(iii) there is no material Action (including any investigation, audit or other administrative proceeding) by the Department of Labor, the PBGC, the IRS or any other Governmental Entity or by any plan participant or beneficiary pending, or to the knowledge of Parent, threatened, relating to the Parent Plans, any fiduciaries thereof with respect to their duties to Parent Plans or the assets of any of the trusts under any of Parent Plans (other than routine claims for benefits);

(iv) none of the Parent Plans currently provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by COBRA, and none of Parent nor any members of its Controlled Group has any liability to provide post-termination or retiree welfare benefits to any person or ever represented, promised or contracted to any employee or former employee of Parent (either individually or to Parent employees as a group) or any other person that such employee(s) or other person would be provided with post-termination or retiree welfare benefits, except to the

extent required by statute or except with respect to a contractual obligation to reimburse any premiums such person may pay in order to obtain health coverage under COBRA;

(v) each Parent Plan is subject exclusively to United States Law; and

(vi) the execution and delivery of this Agreement, the Parent Stockholder Approval, and the consummation of the Merger will not, either alone or in combination with any other event, (A) entitle any current or former employee, officer, director or consultant of Parent to severance pay, unemployment compensation or any other similar termination payment, or (B) accelerate the time of payment or vesting, or increase the amount of or otherwise enhance any benefit due any such employee, officer, director or consultant.

(d) Parent is not a party to any agreement, contract, arrangement or plan (including any Parent Plan) that may reasonably be expected to result, separately or in the aggregate, in connection with the transactions contemplated by this Agreement (either alone or in combination with any other events), in the payment of any "parachute payments" within the meaning of Section 280G of the Code. There is no agreement, plan or other arrangement to which Parent is a party or by which Parent is otherwise bound to compensate any person in respect of Taxes or other liabilities incurred with respect to Section 409A or 4999 of the Code.

(e) Each Parent Plan that is a "nonqualified deferred compensation plan" within the meaning of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) complies in both form and operation in all material respects with the requirements of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) and all applicable IRS guidance issued with respect thereto (and has so complied for the entire period during which Section 409A of the Code has applied to such Parent Plan) so that no amount paid or payable pursuant to any such Parent Plan is subject to any additional Tax or interest under Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law).

(f) No Parent Plan provides major medical health or long-term disability benefits that are not fully insured through an insurance contract.

Section 5.13 Labor and Employment Matters.

(a) Parent is and for the past three (3) years has been in compliance in all material respects with all applicable Laws relating to labor and employment, including those relating to employment practices, terms and conditions of employment, collective bargaining, disability, immigration, health and safety, wages, hours and benefits, non-discrimination in employment, workers' compensation, the collection and payment of withholding and/or payroll Taxes and similar Taxes, unemployment compensation, equal employment opportunity, discrimination, harassment, employee and contractor classification, information privacy and security, and continuation coverage with respect to group health plans. During the preceding three years, there has not been, and as of the date of this Agreement there is not pending or, to the knowledge of Parent, threatened, any labor dispute, work stoppage, labor strike or lockout against Parent by employees.

(b) No employee of Parent is covered by an effective or pending collective bargaining agreement or similar labor agreement. To the knowledge of Parent, there has not been any activity on behalf of any labor union, labor organization or similar employee group to organize any employees of Parent. There are no (i) unfair labor practice charges or complaints against Parent pending before the National Labor Relations Board or any other labor relations tribunal or authority and to the knowledge of Parent no such representations, claims or petitions are threatened, (ii) representations, claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against Parent that arose out of or under any collective bargaining agreement.

(c) To the knowledge of Parent, no current key employee or officer of Parent intends, or is expected, to terminate such individual's employment relationship with Parent in connection with or as a result of the transactions contemplated hereby.

(d) During the preceding three (3) years, (i) Parent has not effectuated a "plant closing" (as defined in the WARN Act) affecting any site of employment or one or more facilities or operating units within any site of employment or facility, (ii) there has not occurred a "mass layoff" (as defined in the WARN Act) in connection with Parent affecting any site of employment or one or more facilities or operating units within any site of employment or facility and (iii) Parent has not engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state, local or foreign law. Parent currently properly classifies and for the past three (3) years has properly classified its and their employees as exempt or non-exempt in accordance with applicable overtime laws.

(e) Except as set forth on Section 5.13(e) of the Parent Disclosure Letter, with respect to any current or former employee, officer, consultant or other service provider of Parent, there are no Actions against Parent pending, or to Parent's knowledge, threatened to be brought or filed, in connection with the employment or engagement of any current or former employee, officer, consultant or other service provider of Parent, including, without limitation, any claim relating to employment discrimination, harassment, retaliation, equal pay, employment classification or any other employment related matter arising under applicable Laws, except where such action would not, individually or in the aggregate, result in Parent incurring a material liability.

(f) Except as set forth on Section 5.13(f) of the Parent Disclosure Letter or with respect to any Parent Plan (which subject is addressed in Section 5.12 above), the execution of this Agreement and the consummation of the transactions set forth in or contemplated by this Agreement will not result in any breach or violation of, or cause any payment to be made under, any applicable Laws respecting labor and employment or any collective bargaining agreement to which Parent is a party.

(g) Since January 1, 2021, (i) no allegations of workplace sexual harassment, discrimination or other misconduct have been made, initiated, filed or, to the knowledge of Parent, threatened against Parent or any of its current or former directors, officers or senior level management employees, (ii) to the knowledge of Parent, no incidents of any such workplace sexual harassment, discrimination or other misconduct have occurred, and (iii) Parent has not entered into any settlement agreement related to allegations of sexual harassment, discrimination or other misconduct by any of their directors, officers or employees described in clause (i) hereof or any independent contractor.

(h) Parent is and has at all relevant times been in compliance with (i) COVID- 19 related Laws, standards, regulations, orders and guidance (including without limitation relating to business reopening), including those issued and enforced by the Occupational Safety and Health Administration, the Centers for Disease Control, the Equal Employment Opportunity Commission, and any other Governmental Entity; and (ii) the Families First Coronavirus Response Act (including with respect to eligibility for tax credits under such Act) and any other applicable COVID-19 related leave Law, whether state, local or otherwise.

(i) Parent and Merger Sub are, and since January 1, 2021 have been, in compliance with all contractual obligations to any other Person not to solicit or not to encourage any employee, independent contractor, advisor, consultant, contractor, vendor, director, customer, or business partner of such Person to terminate or alter in any way their relationship, or not commence a relationship, with that Person. Parent and Merger Sub have not, since January 1, 2021, encouraged, aided and abetted, nor facilitated any other Person's breach of a covenant not to solicit or a covenant not to compete.

Section 5.14 Environmental Matters.

(a) Except as, individually or in the aggregate, is not and would not reasonably be expected to be material to Parent, (i) Parent has conducted its businesses in compliance with all, and have not violated any, applicable Environmental Laws; (ii) Parent has obtained all Permits of all Governmental Entities and any other Person that are required under any Environmental Law; (iii) there has been no release of any Hazardous Substance by Parent or any other Person in any manner that has given or would reasonably be expected to give

rise to any remedial or investigative obligation, corrective action requirement or liability of Parent under applicable Environmental Laws; (iv) Parent has not received any claims, notices, demand letters or requests for information (except for such claims, notices, demand letters or requests for information the subject matter of which has been resolved prior to the date of this Agreement) from any federal, state, local, foreign or provincial Governmental Entity or any other Person asserting that Parent is in violation of, or liable under, any Environmental Law; (v) no Hazardous Substance has been disposed of, arranged to be disposed of, released or transported in violation of any applicable Environmental Law, or in a manner that has given rise to, or that would reasonably be expected to give rise to, any liability under any Environmental Law, in each case, on, at, under or from any current or former properties or facilities owned or operated by Parent or as a result of any operations or activities of Parent at any location and, to the knowledge of Parent, Hazardous Substances are not otherwise present at or about any such properties or facilities in amount or condition that has resulted in or would reasonably be expected to result in liability to Parent under any Environmental Law; and (vi) neither Parent nor any of its properties or facilities are subject to, or are threatened to become subject to, any liabilities relating to any suit, settlement, court order, administrative order, regulatory requirement, judgment or claim asserted or arising under any Environmental Law or any agreement relating to environmental liabilities.

(b) Parent has made available all environmental site assessments, environmental audits and other material environmental documents in the Parent's possession or control relating to the Parent or any of the Parent's current or former properties or facilities.

Section 5.15 Taxes.

(a) Parent has (i) filed all material income and other material Tax Returns required to be filed by or on behalf of it (taking into account any applicable extensions thereof) and all such Tax Returns are true, accurate and complete in all material respects; and (ii) paid in full (or caused to be timely paid in full) all material Taxes that are required to be paid by or with respect to it, whether or not such Taxes were shown as due on such Tax Returns.

(b) All material Taxes not yet due and payable by Parent as of the date of the balance sheet included in the financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents have been, in all respects, properly accrued in accordance with GAAP on the financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents, and such financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents reflect an adequate reserve (in accordance with GAAP) for all material Taxes accrued but unpaid by Parent through the date of such financial statements. Since the date of financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents, Parent has not incurred, individually or in the aggregate, any liability for Taxes outside the ordinary course of business consistent with past practice.

(c) Parent has not executed any waiver of any statute of limitations on, or extended the period for the assessment or collection of, any amount of Tax, in each case that has not since expired.

(d) No material Tax Action with respect to Taxes or any Tax Return of Parent are presently in progress or have been asserted, threatened or proposed in writing and to the knowledge of Parent, no such Tax Action is being contemplated. No deficiencies or claims for a material amount of Taxes have been claimed, proposed, assessed or asserted in writing against Parent by a Governmental Entity, other than any such claim, proposal, assessment or assertion that has been satisfied by payment in full, settled or withdrawn.

(e) Subject to exceptions as would not be material, Parent has timely withheld all Taxes required to have been withheld from payments made (or deemed made) to its employees, independent contractors, creditors, shareholders and other third parties and, to the extent required, such Taxes have been timely paid to the relevant Governmental Entity.

(f) Parent has not engaged in a "listed transaction" as set forth in Treasury Regulations § 1.6011-4(b)(2).

(g) Parent (i) is not a party to or bound by, or has any liability pursuant to, any Tax sharing, allocation, indemnification or similar agreement or obligation other than any Ordinary Course Agreement; (ii) is not or has not been a member of a group (other than a group the common parent of which is Parent) filing a consolidated, combined, affiliated, unitary or similar income Tax Return; (iii) has no liability for the Taxes of any Person (other than Parent) pursuant to Treasury Regulations § 1.1502-6 (or any similar provision of state, local or non-United States Law) as a transferee or successor, by Contract (other than any Ordinary Course Agreement), or otherwise by operation of Law; or (iv) is not or has not been treated as a resident for any income Tax purpose, or as subject to Tax by virtue of having a permanent establishment, an office or fixed place of business, in any country other than the country in which it was or is organized.

(h) No private letter rulings, technical advice memoranda, or similar material agreements or rulings have been requested, entered into or issued by any Governmental Entity with respect to Parent which rulings remain in effect.

(i) Parent will not be required to include any material amount of income in, or exclude any material amount of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of (i) a change in, or use of improper, method of accounting requested or initiated on or prior to the Closing Date, (ii) a "closing agreement" as described in Section 7121 of the Code (or any similar provision of Law) executed on or prior to the Closing Date, (iii) an installment sale or open transaction disposition made on or prior to the Closing Date, (iv) any prepaid amount received or deferred revenue accrued on or prior to the Closing Date, other than in respect of such amounts reflected in the balance sheet included in the financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents, or received in the ordinary course of business since the date of such balance sheet, (v) to Parent's knowledge, an intercompany transaction or excess loss amount described in Treasury Regulations under Section 1502 of the Code (or any corresponding or similar provision of state, local or foreign income Tax Law), (vi) an election under Section 965 of the Code, or (vii) the application of Sections 951 or 951A of the Code with respect to income earned or recognized or payments received prior to the Closing.

(j) There are no liens for Taxes upon any of the assets of Parent other than Liens described in clause (i) of the definition of Permitted Liens.

(k) Parent has not distributed stock of another Person or has had its stock distributed by another Person, in a transaction (or series of transactions) that was purported or intended to be governed in whole or in part by Sections 355 or 361 of the Code.

(l) Parent has not been a United States real property holding corporation, as defined in Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(m) No material claim has been made in writing by any Governmental Entity in a jurisdiction where Parent does not currently file a Tax Return of a certain type or pay Taxes of a certain type that Parent is or may be subject to taxation by such jurisdiction of such type.

(n) To Parent's knowledge, Parent has not been, is not, and immediately prior to the Effective Time will not be, treated as an "investment company" within the meaning of Section 368(a)(2)(F) of the Code.

(o) Neither Parent nor Merger Sub has taken, or failed to take, any action nor knows of any fact or circumstance that could reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment.

For purposes of this Section 5.15, where the context permits, each reference to Parent shall include a reference to any person for whose Taxes Parent is liable under applicable law.

Section 5.16 Contracts.

(a) Except for any Parent Plans (which are the subject of Section 5.12) and except as set forth in the Parent SEC Documents publicly available prior to the date of this Agreement, Parent is not a party to or bound by any "material contract" (as such term is defined in Item 601(b)(10) of Regulation S-K under the Securities Act) (all such contracts including those set forth in Section 5.16(b) of the Parent Disclosure Letter, "Parent Material Contracts").

(b) Section 5.16(b) of the Parent Disclosure Letter lists the following contracts, which for the purposes of this Agreement shall be considered Parent Material Contracts:

(i) each Contract relating to any agreement of indemnification or guaranty not entered into in the ordinary course of business;

(ii) each Contract containing (A) any covenant limiting the freedom of the Parent, its Subsidiaries or the Surviving Company to engage in any line of business or compete with any Person, or limiting the development, manufacture or distribution of the Surviving Company's products or services (B) any most-favored pricing arrangement, (C) any exclusivity provision in favor of a third party or (D) any non-solicitation provision applicable to Parent or its Subsidiaries, in the case of the foregoing clause (D) which are material to Parent or its Subsidiaries, as applicable, taken as a whole;

(iii) each Contract relating to capital expenditures and requiring payments after the date of this Agreement in excess of $5,000 pursuant to its express terms and not cancelable without penalty;

(iv) each Contract relating to the disposition or acquisition of material assets or any ownership interest in any Person;

(v) each Contract relating to any mortgages, indentures, loans, notes or credit agreements, security agreements or other agreements or instruments relating to the borrowing of money or extension of credit in excess of $100,000 or creating any material Liens with respect to any assets of the Parent or any of its Subsidiaries or any loans or debt obligations with officers or directors of the Parent;

(vi) each Contract requiring payment by or to the Parent after the date of this Agreement in excess of $25,000 pursuant to its express terms relating to: (A) any Contract involving a dealer, distributor, joint marketing, alliance, joint venture, cooperation, research and/or development (including pre-clinical and clinical research and/or development), material transfer, services (including technical writing and consulting), manufacturing, supply, distribution or other agreement relating to the research, development, testing, labeling, manufacturing, marketing, commercialization, or distribution of any product, technology or service, or any Contract pursuant to which any Intellectual Property is developed by or for Parent or (B) any Contract to license any patent, trademark registration, service mark registration, trade name or copyright registration to or from any third party to research, develop, test, label, manufacture, market, or produce any product, service or technology of the Parent or any Contract to sell, distribute or commercialize any products or services of the Parent;

(vii) each Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to the Parent in connection with the transactions contemplated hereby;

(viii) each Contract relating to leases of real properties with respect to which the Parent directly or indirectly holds a valid leasehold interest as well as any other real estate that is in the possession of or leased by Parent or any of its Subsidiaries;

(ix) each Contract to which the Parent is a party or by which any of its assets and properties is currently bound, which involves annual obligations of payment by, or annual payments to, the Parent in excess of $10,000; and

(x) any other Contract that is not terminable at will (with no penalty or payment) by the Parent, and that is material to the business or operations of the Parent.

(c) Each Parent Material Contract is valid and binding on Parent, and to the knowledge of Parent, each other party thereto, and is in full force and effect and enforceable in accordance with its terms; (ii) Parent, and, to the knowledge of Parent, each other party thereto, has performed all material obligations required to be performed by it under each Parent Material Contract; and (iii) there is no material default under any Parent Material Contract by Parent or, to the knowledge of Parent, any other party thereto, and no event or condition has occurred that constitutes, or, after notice or lapse of time or both, would constitute, a material default on the part of Parent or, to the knowledge of Parent, any other party thereto under any such Parent Material Contract, nor has Parent received any notice of any such material default, event or condition. Parent has made available to the Company true and complete copies of all Parent Material Contracts, including all amendments thereto. Except as set forth in Section 5.16(c) of the Parent Disclosure Letter, there are no Parent Material Contracts that are not in written form. No Person is renegotiating, or has a right pursuant to the terms of any Parent Material Contract to change, any material amount paid or payable to the Parent under any Parent Material Contract or any other material term or provision of any Parent Material Contract.

(d) Parent will terminate all Parent Material Contracts (including all statements of work, work orders, change orders, purchase orders, and any other Contract thereunder) effective no later than the Closing Date. As of such termination: (i) other than those Contracts identified in Section 5.16(d)(i) of the Parent Disclosure Letter, no party thereto or third party beneficiary thereof has or will have any right, title, or interest (including under any license grants or by exercise of any options or technology transfer rights) in or to any part of Parent Registered IP or Material Company Registered IP; (ii) other than those Contracts identified in Section 5.16(d)(ii) of the Parent Disclosure Letter, no payment under any such Parent Material Contract is or will be due or payable by Parent to any party thereto or third party beneficiary thereof (including in connection with any completed work or work-in-progress; severance costs; non-cancellable expenses or commitments; early termination penalties; termination costs; wind-down costs; royalties; or milestones); (iii) other than those Contracts identified in Section 5.16(d)(iii) of the Parent Disclosure Letter, Parent is under no obligation under such Parent Material Contracts, on its own or with any other party thereto or third party beneficiary thereof, to: (A) research, develop, manufacture, or commercialize any product or service thereunder; (B) make any regulatory filing with respect thereto or seek or obtain regulatory approval therefor; or (C) fund or commit any funding or resources, make any efforts, or prepare or submit any reports (including information reports and progress reports), with respect to any of the foregoing; and (iv) other than those Contracts identified in Section 5.16(d)(iv) of the Parent Disclosure Letter, no party thereto or third party beneficiary thereof has or will have any outstanding subscriptions, options, warrants, calls, commitments, Contracts or other rights under such Parent Material Contract to acquire or be issued, granted, delivered, sold, or cause to be issued, granted, delivered or sold, any shares of capital stock of the Parent or any of its Subsidiaries, voting securities, stock appreciation rights, "phantom" stock rights, performance units, interests in or rights to the ownership or earnings of the Parent or any of its Subsidiaries or other equity equivalent or equity-based awards or rights, or equity interests or securities convertible into or exchangeable or exercisable for capital stock or other voting securities or equity interests of the Parent or any of its Subsidiaries.

Section 5.17 Insurance. Parent is covered by valid and currently effective insurance policies issued in favor of Parent that are customary and adequate for companies of similar size in the industries and locations in which Parent operates and that meet or exceed the aggregate coverage amounts and other insurance requirements set forth in the Parent Material Contracts. Section 5.17(i) of the Parent Disclosure Letter sets forth, as of the date hereof, a true and complete list of all material insurance policies issued in favor of Parent, or pursuant to which Parent is a named insured or otherwise a beneficiary, as well as any historic incurrence-based policies still in force. With respect to each such insurance policy, (a) such policy is in full force and effect and all premiums due

thereon have been paid, (b) Parent is not in breach or default, and has not taken any action or failed to take any action which (with or without notice or lapse of time, or both) would constitute such a breach or default, or would permit termination or modification of, any such policy and (c) no insurer issuing any such policy has been declared insolvent or placed in receivership, conservatorship or liquidation. No notice of cancellation or termination has been received with respect to any such policy, nor will any such cancellation or termination result from the consummation of the transactions contemplated hereby. Section 5.17(ii) of the Parent Disclosure Letter sets forth, a true and complete list of all (A) active (as of the Closing Date) and (B) expired or terminated (as of the Closing Date) Parent Material Contracts that require Parent to obtain or maintain certain insurance coverages after the Closing Date.

Section 5.18 Properties.

(a) Parent has good and valid title to, or in the case of leased property and leased tangible assets, a valid leasehold interest in, all of its real properties and tangible assets that are necessary for Parent to conduct its businesses as currently conducted, free and clear of all Liens other than Permitted Liens. Except as would not be material to Parent, the tangible personal property currently used in the operation of the business of Parent is in good working order (reasonable wear and tear excepted).

(b) Parent has complied with the terms of all leases to which it is a party, and all such leases are in full force and effect, except for any such noncompliance or failure to be in full force and effect that, individually or in the aggregate, is not or would not be material to Parent. Parent enjoys peaceful and undisturbed possession under all such leases, except for any such failure to do so that, individually or in the aggregate, is not or would not be material to Parent.

(c) Parent nor any of its Subsidiaries owns or has ever owned any real property, nor is either party to any agreement to purchase or sell any real property. Section 5.18(c) of the Parent Disclosure Letter sets forth a list of all real property currently leased, subleased or licensed by or from the Parent or any of its Subsidiaries or otherwise used or occupied by the Parent or any of its Subsidiaries (the "Parent Facilities"), the name of the lessor, licensor, sublessor, master lessor and/or lessee, the date and term of the lease, license, sublease or other occupancy right and each amendment thereto, the size of the premises, the amount and type of any security deposit, letter of credit or similar instrument required and delivered thereunder, all current and future rent (including, without limitation, base rent, additional rent, operating expenses, common area charges, taxes and utility costs) payable thereunder and an estimate of any costs that may be required by Parent or its Subsidiaries to comply with the surrender and restoration provisions of the lease, license, sublease or other occupancy right. Parent has provided the Company with true, correct and complete copies of all leases, lease guaranties, licenses, subleases, agreements for the leasing, use or occupancy of, or otherwise granting a right in or relating to the Parent Facilities, including all notices exercising any extension or expansion rights thereunder and amendments, terminations, consents, subordination, non-disturbance and attornment agreements, estoppel certificates and other modifications thereof (the "Parent Lease Agreements"). All such Parent Lease Agreements are in full force and effect and are valid and enforceable in accordance with their respective terms. There is not, under any Parent Lease Agreements, any existing default or event of default (or event which with notice or lapse of time, or both, would constitute a default) of the Parent or any of its Subsidiaries, or to the Parent's Knowledge, any other party thereto. The execution and delivery of this Agreement by the Parent does not, and the consummation of the transactions contemplated hereby will not, result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or materially impair the rights of the Parent or any of its Subsidiaries or alter the rights or obligations of the sublessor, lessor or licensor under, or give to others any rights of termination, amendment, acceleration or cancellation of any Parent Lease Agreements, or otherwise adversely affect the continued use and possession of the Parent Facilities for the conduct of business as presently conducted.

(d) Section 5.18(d) of the Parent Disclosure Letter sets forth a list of all subleases, licenses or other agreements for the use or occupancy by any other parties of the Parent Facilities (the "Parent Subleased

Premises"), the name of the sublessee, licensee or other occupant, the date and term of the sublease, license or other occupancy right and each amendment thereto, the size of the subleased or licensed premises, the amount and type of any security deposit, letter of credit or similar instrument required and delivered thereunder and all current and future rent (including, without limitation, base rent, additional rent, operating expenses, common area charges, taxes and utility costs) payable by the sublessee, licensee or other occupant thereunder. Parent has provided the Company with true, correct and complete copies of all subleases, licenses, agreements for the subleasing, use or occupancy of, or otherwise granting a right in or relating to the Parent Subleased Premises, including all notices exercising any extension or expansion rights thereunder and amendments, terminations, consents, subordination, non-disturbance and attornment agreements, estoppel certificates and other modifications thereof (the "Parent Sublease Agreements"). All such Parent Sublease Agreements are in full force and effect and are valid and enforceable in accordance with their respective terms. There is not, under any Parent Sublease Agreements, any existing default or event of default (or event which with notice or lapse of time, or both, would constitute a default) of the Parent or any of its Subsidiaries, or to the knowledge of Parent, any other party thereto.

(e) The Parent and each of its Subsidiaries has performed all of its obligations under any agreements related to the termination, release of liability, reduction of liability or mitigation of liability with respect to any Parent Lease Agreement or any other leases of real property that are no longer in effect (the "Parent Lease Mitigation Agreements").

(f) The Parent Facilities are in good operating condition and repair. Neither the Parent nor any Subsidiary is required to pay for or perform (or reasonably expects to be required to pay for or perform) any material maintenance, repair or replacements obligations under any Parent Lease Agreement, including, without limitation, the payment for or performance of any alterations or improvements to cause the Parent Facilities to comply with applicable Law. To the Parent's Knowledge, the Parent Facilities do not violate any Law relating to such property or operations thereon. Except as set forth on Section 5.18(f) of the Parent Disclosure Letter, neither the Parent nor any Subsidiaries is party to any agreement or subject to any claim that may require the payment of any real estate brokerage commissions. Neither the Parent nor any of its Subsidiaries owes any commissions or other similar fees with respect to any of the Parent Facilities, Parent Lease Agreements, Parent Sublease Agreements or Parent Lease Mitigation Agreements.

(g) This Section 5.18 does not relate to intellectual property, which is the subject of Section 5.19.

Section 5.19 Intellectual Property.

(a) Section 5.19(a) of the Parent Disclosure Letter sets forth a true and complete list of all of the following that are owned by or licensed to Parent: (i) material patents and patent applications; (ii) material trademark registrations and applications; and (iii) material copyright registrations and applications ((i)-(iii), collectively, "Material Parent Registered IP") and a true and complete list of all domain names. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect (A) all of the Material Parent Registered IP owned by Parent, and with respect to Material Parent Registered IP not owned by Parent, to the knowledge of Parent, is subsisting, (B) any Material Parent Registered IP that is registered or issued is, to the knowledge of Parent, valid and enforceable, (C) as of the date of this Agreement, Parent has not received written notice that (x) any such Material Parent Registered IP is involved in any interference, reissue, derivation, reexamination, opposition, cancellation or similar proceeding contesting the validity, enforceability, claim construction, ownership or right to use, sell, offer for sale, license or dispose of any Material Parent Registered IP, or (y) any such action is threatened with respect to any of the Material Parent Registered IP, (D) all Material Parent Registered IP owned by Parent is owned exclusively by Parent, free and clear of any and all Liens (other than Permitted Liens), and any Material Parent Registered IP not owned by Parent is, to the knowledge of Parent, free and clear of any and all Liens (other than Permitted Liens), and (E) all patents or patent applications in the Parent Owned IP that are not Material Parent Registered IP are free and clear of any and all Liens (other than Permitted Liens).

(b) Section 5.19(b) of the Parent Disclosure Letter accurately identifies (i) all Contracts pursuant to which any material Intellectual Property is licensed to Parent (other than (A) any generally commercially available software and Intellectual Property associated with such software, in each case that is licensed on a non-exclusive basis to Parent, (B) any Intellectual Property licensed on a nonexclusive basis ancillary to the purchase or use of equipment, reagents or other materials, (C) any confidential information provided under confidentiality agreements and (D) agreements between Parent and its employees in Parent's standard form thereof).

(c) Section 5.19(c) of the Parent Disclosure Letter accurately identifies each Contract pursuant to which any Person has been granted any license (or option to license) under, or otherwise has received or acquired, any Material Parent Registered IP (other than (i) any confidential information provided under confidentiality agreements and (ii) any Material Parent Registered IP licensed to academic collaborators, suppliers or service providers for the sole purpose of enabling such academic collaborator, supplier or service providers to provide services for Company's benefit), in each case that is exercisable by such Person after the Closing Date.

(d) Parent has taken commercially reasonable measures to maintain the confidentiality of all information that constitutes or constituted a material Trade Secret of Parent, including requiring all Persons having access thereto to execute written non-disclosure agreements or other binding obligations to maintain confidentiality of such information.

(e) Except as set forth on Section 5.19(e) of the Parent Disclosure Letter, or has not had and would not reasonably be expected to have, individually or in the aggregate, a Parent Material Adverse Effect, (i) to the knowledge of Parent, the conduct of the businesses of Parent, including the manufacture, marketing, offering for sale, sale, importation, use or intended use or other disposal of any product as currently sold or under development by Parent, has not infringed, misappropriated or diluted, and does not infringe, misappropriate or dilute, any Intellectual Property of any Person, (ii) Parent has not received any written notice or claim asserting or suggesting that any such infringement, misappropriation, or dilution is or may be occurring or has or may have occurred, (iii) no claims have been asserted related to the correspondences set forth in Section 5.19(e) of the Parent Disclosure Letter and no circumstances exist that would give rise to such claims, and (iv) to the knowledge of Parent, no Person is infringing, misappropriating, or diluting in any material respect any Parent Registered IP.

(f) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, in the three (3) years immediately preceding the date hereof: (i) Parent has taken commercially reasonable steps designed to protect the confidentiality and security of the computer and information technology systems used by Parent (the "Parent IT Systems") and the information stored or contained therein or transmitted thereby, (ii) to the knowledge of Parent, there has been no unauthorized or improper use, loss, access, transmittal, modification or corruption of any such information in the possession or control of Parent.

(g) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, (i) in the three (3) years immediately preceding the date hereof, to the knowledge of Parent, Parent has complied in all material respects with all Laws relating to privacy and data protection applicable to the collection, retention, and use by Parent of Personal Information ("Parent Privacy Laws"), (ii) no claims by or before any Governmental Entity have been asserted or, to the knowledge of Parent, have been threatened in writing against Parent alleging a violation of any applicable Parent Privacy Laws, (iii) neither this Agreement nor the consummation of the transactions contemplated hereby will breach or otherwise violate any Parent Privacy Laws and (iv) Parent has taken commercially reasonable steps designed to protect any Personal Information collected, retained or used by Parent against unauthorized or improper use, loss, access or transmittal.

(h) To the knowledge of Parent, no government funding, facilities or resources of a university, college, other educational institution or research center or funding from third parties was used in the development of the

Material Parent Registered IP, and no Governmental Entity, university, college, other educational institution or research center has, to the knowledge of Parent, any claim or right in or to such Material Parent Registered IP.

(i) Except as set forth on Section 5.19(i) of the Parent Disclosure Letter, the execution, delivery and performance by Parent of this Agreement, and the consummation of the transactions contemplated hereby, will not result in the loss of (other than as a result of a termination by Parent that is required under Section 5.16(d)), or give rise to any right of any third party to terminate or modify any of Parent's rights or obligations under any agreement under which Parent grants to any Person, or any Person grants to Parent, a license or right under or with respect to any Intellectual Property that is material to any of the businesses of Parent, including any of the agreements listed in Section 5.19(b) or Section 5.19(c) of the Parent Disclosure Letter.

Section 5.20 Related Party Transactions. For the three (3) years preceding the date hereof, through the date of this Agreement, there have been no transactions, agreements, arrangements or understandings between Parent, on the one hand, and the Affiliates of Parent, on the other hand that would be required to be disclosed under Item 404 of Regulation S-K under the Securities Act and that have not been so disclosed in the Parent SEC Documents.

Section 5.21 Certain Payments. Neither Parent nor, to the knowledge of Parent, any of its directors, executives, representatives, agents or employees (a) has used or is using any corporate funds for any illegal contributions, gifts, entertainment or other unlawful expenses relating to political activity, (b) has used or is using any corporate funds for any direct or indirect unlawful payments to any foreign or domestic governmental officials or employees, (c) has violated or is violating any provision of the Foreign Corrupt Practices Act of 1977, as amended, (d) has established or maintained, or is maintaining, any unlawful fund of corporate monies or other properties, or (e) has made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment of any nature.

Section 5.22 Brokers. No broker, investment banker, financial advisor or other Person, other than Leerink Partners LLC, the fees and expenses of which will be paid by Parent, is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of Parent. Parent has furnished to Company a true and complete copy of any Contract between Parent and Leerink Partners LLC pursuant to which Leerink Partners LLC could be entitled to any payment from Parent relating to the transactions contemplated hereby.

Section 5.23 Opinion of Financial Advisor. Parent Board has received the opinion of Leerink Partners LLC, dated the date of this Agreement, to the effect that, as of such date and based upon and subject to the qualifications, limitations, assumptions and other matters set forth therein, the Exchange Ratio is fair, from a financial point of view, to Parent. It is agreed and understood that such opinion is for the benefit of the Parent Board and may not be relied upon by the Company. Parent will make available to the Company a signed copy of such opinion as soon as possible following the date of this Agreement.

Section 5.24 State Takeover Statutes. No Takeover Laws or any similar anti-takeover provision in the Certificate of Incorporation or Bylaws of Parent applicable to Parent is, or at the Effective Time will be, applicable to this Agreement, the Merger, the Parent Common Stock Issuance, or any of the other transactions contemplated hereby. The Parent Board and the Merger Sub board have taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement, the Parent Support Agreements and to the consummation of the transactions contemplated by this Agreement or the Parent Support Agreements.

Section 5.25 Subscription Agreement. The Subscription Agreement has not been amended or modified in any manner prior to the date of this Agreement. Neither Parent nor, to the knowledge of Parent, any of its Affiliates, has entered into any agreement, side letter or other arrangement relating to the Concurrent PIPE

Investment other than as set forth in the Subscription Agreement. The respective obligations and agreements contained in the Subscription Agreement have not been withdrawn or rescinded in any respect. The Subscription Agreement is in full force and effect and represents a valid, binding and enforceable obligation of Parent and, to the knowledge of Parent, of each party thereto (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity). No event has occurred which, with or without notice, lapse of time or both, would constitute a breach or default on the part of Parent, or to the knowledge of Parent, any other party thereto, under the Subscription Agreement. To the knowledge of Parent, no party thereto will be unable to satisfy on a timely basis any term of the Subscription Agreement. There are no conditions precedent related to the consummation of the Concurrent PIPE Investment contemplated by the Subscription Agreement, other than the satisfaction or waiver of the conditions expressly set forth in Section 6 of the Subscription Agreement. To the knowledge of Parent, the proceeds of the Concurrent PIPE Investment will be made available to the Surviving Company immediately following the consummation of the Merger.

Section 5.26 No Other Representations or Warranties. Except for the representations and warranties contained in Article IV, each of Parent and Merger Sub acknowledges and agrees that none of the Company or any other Person on behalf of the Company makes any other express or implied representation or warranty whatsoever, and specifically (but without limiting the generality of the foregoing) that none of the Company or any other Person on behalf of the Company makes any representation or warranty with respect to any projections or forecasts delivered or made available to Parent, Merger Sub or any of their respective Representatives of future revenues, results of operations (or any component thereof), cash flows or financial condition (or any component thereof) of the Company (including any such projections or forecasts made available to Parent, Merger Sub or any of their respective Representatives in certain "data rooms" or management presentations in expectation of the transactions contemplated by this Agreement), and none of Parent or Merger Sub has relied on any such information or any representation or warranty not set forth in Article IV.

ARTICLE VI
COVENANTS

Section 6.1 Operation of Parent's Business.

(a) Except as expressly contemplated or permitted by this Agreement, as required by applicable Law or unless the Company shall otherwise consent in writing (which consent shall not be unreasonably withheld, delayed or conditioned), during the period commencing on the date of this Agreement and continuing until the earlier to occur of the termination of this Agreement pursuant to Article IX and the Effective Time (the "Pre-Closing Period"), Parent shall, and shall cause its Subsidiaries to, use commercially reasonable efforts to conduct its business and operations in the ordinary course of business and consistent with past practice and in material compliance with the applicable Law and the requirements of all Contracts that constitute Parent Material Contracts.

(b) Notwithstanding anything to the contrary herein, Parent shall use reasonable best efforts to file with the SEC the Parent Form 10-K, including all required audited financial statements in connection therewith, which such efforts shall include, for the avoidance of doubt, expending any resources necessary to maintain or obtain employees, contractors, advisors, auditors or other service providers that are advisable or necessary to make such filing on a timely basis. Such filing shall be in form and substance and in full compliance with, and within the time period required by, applicable Law, and, in the event Closing occurring following December 31, 2023, prior to the Closing.

(c) Except (i) as expressly contemplated or permitted by this Agreement, (ii) as set forth in Section 6.1(c) of the Parent Disclosure Letter, (iii) as required by applicable Law or (iv) with the prior written consent of the Company (which consent shall not be unreasonably withheld, delayed or conditioned), at all times

during the Pre-Closing Period, Parent shall not, nor shall it cause or permit any of its Subsidiaries to, do any of the following:

(i) declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities (except for shares of Parent Common Stock from terminated employees, directors or consultants of Parent in accordance with agreements in effect on the date of this Agreement providing for the repurchase of shares at no more than the purchase price thereof in connection with any termination of services to Parent or any of its Subsidiaries);

(ii) sell, issue, grant, pledge or otherwise dispose of or encumber or authorize the issuance of: (A) any capital stock or other security (except for Parent Common Stock issued upon the valid exercise or settlement of outstanding Parent Options or Parent Restricted Stock Awards as applicable), (B) any option, warrant or right to acquire any capital stock or any other security or (C) any instrument convertible into or exchangeable for any capital stock or other security;

(iii) except as required to give effect to anything in contemplation of the Closing, amend any of its organizational documents, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the transactions contemplated hereby;

(iv) form any Subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;

(v) (A) lend money to any Person (other than routine advances to employees of Parent or its Subsidiaries in the ordinary course of business and consistent with past practice, pursuant to Parent Plans), (B) incur or guarantee any indebtedness for borrowed money, (C) guarantee any debt securities of others or (D) make any capital expenditure or commitment;

(vi) other than as required by applicable Law or the terms of any Parent Plan in effect as of the date of this Agreement: (A) adopt, establish or enter into any Parent Plan, including, for the avoidance of doubt, any equity award plans, (B) cause or permit any Parent Plan to be amended other than as required by law or in order to make amendments for the purposes of Section 409A of the Code, (C) pay any bonus or make any profit-sharing or similar payment to (except with respect to obligations in place on the date of this Agreement pursuant to any Parent Plan), or increase the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its employees, directors or consultants, (D) increase the severance or change of control benefits offered to any current or new employees, directors or consultants, or (E) hire any officer, employee or consultant;

(vii) enter into any material transaction outside the ordinary course of business consistent with past practice;

(viii) acquire any material asset or sell, lease, license or otherwise irrevocably dispose of any of its assets or properties, or grant any Lien with respect to such assets or properties;

(ix) make (other than consistent with past practice), change or revoke any material Tax election; file any material amendment to any Tax Return; settle or compromise any material Tax claim; waive or extend any statute of limitations in respect of a period within which an assessment or reassessment of material Taxes may be issued (other than any extension pursuant to an extension to file any Tax Return); enter into any "closing agreement" as described in Section 7121 of the Code (or any similar Law) with any Governmental Entity; or adopt or change any material accounting method in respect of Taxes;

(x) waive, settle or compromise any pending or threatened Action against Parent or any of its Subsidiaries;

(xi) delay or fail to repay when due any material obligation, including accounts payable and accrued expenses, other than in the ordinary course of business and consistent with past practice;

(xii) forgive any loans to any Person, including its employees, officers, directors or Affiliate;

(xiii) sell, assign, transfer, license, sublicense or otherwise dispose of any material Parent Registered IP;

(xiv) terminate or modify in any material respect, or fail to exercise renewal rights with respect to, any material insurance policy;

(xv) except as set forth in Section 5.16(d), enter into, amend, terminate, or waive any material option or right under, any Parent Material Contract;

(xvi) enter into any agreement to purchase or sell any interest in real property, grant any security interest in any real property, enter into any lease, sublease, license or other occupancy agreement with respect to any real property or alter, amend, modify, exercise any extension or expansion right under or violate or terminate any of the terms of any Parent Lease Agreements, Parent Sublease Agreements or Parent Lease Mitigation Agreements;

(xvii) (A) materially change pricing or royalties or other payments set or charged by Parent or any of Subsidiaries to its customers or licensees or (B) agree to materially change pricing or royalties or other payments set or charged by Persons who have licensed Intellectual Property to Parent or any of its Subsidiaries;

(xviii) other than as required by Law or GAAP, take any action to change accounting policies or procedures; or

(xix) agree, resolve or commit to do any of the foregoing.

Nothing contained in this Agreement shall give the Company, directly or indirectly, the right to control or direct the operations of Parent prior to the Effective Time. Prior to the Effective Time, Parent shall exercise, consistent with the terms and conditions of this Agreement, complete unilateral control and supervision over its business operations.

(d) Notwithstanding any provision herein to the contrary (including the foregoing provisions of this Section 6.1), Parent may engage in the sale, license, transfer, disposition, divestiture or other monetization transaction (i.e., a royalty transaction) and/or winding down of, and/or the sale, license, transfer, disposition, divestiture or other monetization transaction (i.e., a royalty transaction) or other disposition of any Parent Legacy Assets (each, an "Parent Legacy Transaction"); provided, however, that to the extent any Parent Legacy Transaction (A) results in any obligations of or adverse consequences to Parent or its Subsidiaries that could extend beyond Closing, (B) contemplates that any consideration paid in respect thereof is in anything other than immediately available cash, or (C) otherwise interferes with or delays in any manner the ability of Parent to perform its obligations under this Agreement or timely consummate the transactions contemplated hereby Parent shall procure prior written consent of the Company prior to entering into any Parent Legacy Transaction, which consent will not be unreasonably withheld or delayed. Notwithstanding anything to the contrary herein, Parent (i) shall permit the Company and its counsel to review and comment on the transaction documents related to the Parent Legacy Transaction; (ii) shall consider any such comments in good faith and shall accept all reasonable additions, deletions or changes suggested by the Company and its counsel in connection therewith; and (iii) shall not sign any agreements, contracts or other definitive documents (not including term sheets or letters of intent) related to Parent Legacy Transaction without first providing the Company and its counsel the opportunity to exercise their rights under clauses (i) and (ii) above.

Section 6.2 Operation of Company's Business.

(a) Except as expressly contemplated or permitted by this Agreement, as required by applicable Law or unless Parent shall otherwise consent in writing (which consent shall not be unreasonably withheld, delayed or conditioned), during the Pre-Closing Period, the Company shall use commercially reasonable efforts to conduct its business and operations in the ordinary course of business and consistent with past practice and in material compliance with the applicable Law and the requirements of all Contracts that constitute Company Material Contracts.

(b) Except (i) as expressly contemplated or permitted by this Agreement, including the Subscription Agreement or a Permitted Stock Purchase Agreement, (ii) as set forth in Section 6.2(b) of the Company Disclosure Letter, (iii) as required by applicable Law or (iv) with the prior written consent of Parent (which consent shall not be unreasonably withheld, delayed or conditioned), at all times during the Pre-Closing Period, the Company shall not do any of the following:

(i) declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities (except for shares of Company Capital Stock from terminated employees, directors or consultants of the Company in accordance with agreements in effect on the date of this Agreement providing for the repurchase of shares at no more than the purchase price thereof in connection with any termination of services to the Company);

(ii) sell, issue, grant, pledge or otherwise dispose of or encumber or authorize the issuance of: (A) any capital stock or other security (except for Company Capital Stock issued upon the valid exercise or settlement of outstanding Company Options), (B) any option, warrant or right to acquire any capital stock or any other security or (C) any instrument convertible into or exchangeable for any capital stock or other security (other than the grant of Company Options under the Company Equity Plan in the ordinary course of business and consistent with past practice);

(iii) except as required to give effect to anything in contemplation of the Closing, amend any of its organizational documents, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the transactions contemplated hereby;

(iv) form any Subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;

(v) (A) lend money to any Person (other than routine advances to employees of the Company in the ordinary course of business and consistent with past practice, pursuant to Company Plans), (B) incur or guarantee any material indebtedness for borrowed money, (C) guarantee any debt securities of others or (D) make any material capital expenditure or commitment;

(vi) enter into any material transaction for more than $1,500,000 in excess of the amount provided for the Company's forecasted operating budget, which budget is set forth on Section 6.2(b)(vi) of the Company Disclosure Letter (the "Company Budget");

(vii) other than in the ordinary course of business or as contemplated by the Company Budget, acquire any material asset or sell, lease, license or otherwise irrevocably dispose of any of its material assets or properties, or grant any Lien with respect to such assets or properties;

(viii) make (other than consistent with past practice), change or revoke any material Tax election; file any material amendment to any Tax Return; settle or compromise any material Tax claim; waive or extend

any statute of limitations in respect of a period within which an assessment or reassessment of material Taxes may be issued (other than any extension pursuant to an extension to file any Tax Return); enter into any "closing agreement" as described in Section 7121 of the Code (or any similar Law) with any Governmental Entity; or adopt or change any material accounting method in respect of Taxes;

(ix) waive, settle or compromise any pending or threatened Action against the Company, other than waivers, settlements or agreements (A) for an amount not in excess of $500,000 in the aggregate (excluding amounts to be paid under existing insurance policies or renewals thereof) and (B) that do not impose any material restrictions on the operations or businesses of the Company, taken as a whole, or any equitable relief on, or the admission of wrongdoing by the Company;

(ix) delay or fail to repay when due any material obligation, including accounts payable and accrued expenses, other than in the ordinary course of business and consistent with past practice;

(x) forgive any material loans to any Person, including its employees, officers, directors or Affiliate;

(xi) sell, assign, transfer, license, sublicense or otherwise dispose of any material Intellectual Property of the Company (other than in the ordinary course of business and consistent with past practice);

(xii) terminate or modify in any material respect, or fail to exercise renewal rights with respect to, any material insurance policy, in each case, without obtaining commercially reasonable alternatives;

(xiii) other than in the ordinary course of business, (A) materially change pricing or royalties or other payments set or charged by the Company to its customers or licensees or (B) agree to materially change pricing or royalties or other payments set or charged by Persons who have licensed Intellectual Property to the Company; or

(xiv) agree, resolve or commit to do any of the foregoing.

Nothing contained in this Agreement shall give Parent, directly or indirectly, the right to control or direct the operations of the Company prior to the Effective Time. Prior to the Effective Time, the Company shall exercise, consistent with the terms and conditions of this Agreement, complete unilateral control and supervision over its business operations.

Section 6.3 Access and Investigation.

(a) Subject to the terms of the Confidentiality Agreement, which the parties agree will continue in full force following the date of this Agreement, during the Pre-Closing Period, upon reasonable notice, Parent, on the one hand, and the Company, on the other hand, shall and shall use commercially reasonable efforts to cause such party's Representatives to: (a) provide the other party and such other party's Representatives with reasonable access during normal business hours to such party's Representatives, personnel, property and assets and to all existing books, records, Tax Returns, work papers and other documents and information relating to such party and its Subsidiaries, (b) provide the other party and such other party's Representatives with such copies of the existing books, records, Tax Returns, work papers, product data and other documents and information relating to such party and its Subsidiaries, and with such additional financial, operating and other data and information regarding such party and its Subsidiaries as the other party may reasonably request, (c) permit the other party's officers and other employees to meet, upon reasonable notice and during normal business hours, with the chief financial officer and other officers and managers of such party responsible for such party's financial statements and the internal controls of such party to discuss such matters as the other party may deem necessary and (d) make available to the other party copies of any material notice, report or other document filed with or sent to or received from any Governmental Entity in connection with the transactions contemplated hereby. Any investigation conducted by either Parent or the Company pursuant to this Section 6.3 shall be conducted in such manner as not to interfere unreasonably with the conduct of the business of the other party.

(b) Notwithstanding anything herein to the contrary in this Section 6.3, no access or examination contemplated by this Section 6.3 shall be permitted to the extent that it would require any party or its Subsidiaries (i) to waive the attorney-client privilege or attorney work product privilege, (ii) violate any applicable Law or (iii) breach such party's confidentiality obligations to a third party; provided, that such party or its Subsidiary (A) shall be entitled to withhold only such information that may not be provided without causing such violation or waiver,

(B) shall provide to the other party all related information that may be provided without causing such violation or waiver (including, to the extent permitted, redacted versions of any such information), (C) shall enter into such effective and appropriate joint-defense agreements or other protective arrangements as may be reasonably requested by the other party in order that all such information may be provide to the other party without causing such violation or waiver, and (D) in the case of subsection (iii) above, upon the other party's reasonable request, such party shall use its reasonable efforts to obtain such third party's consent to permit such other party access to such information, subject to appropriate confidentiality protections.

Section 6.4 No Solicitation.

(a) Each of Parent and the Company agrees that, during the Pre-Closing Period, neither it nor any of its Subsidiaries shall, nor shall it or any of its Subsidiaries authorize any of its Representatives to, directly or indirectly: (i) solicit, initiate or knowingly encourage, induce or facilitate the communication, making, submission or announcement of any Acquisition Proposal or Acquisition Inquiry or take any action that could reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry, (ii) furnish any nonpublic information regarding such party to any Person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry, (iii) engage in discussions or negotiations with any Person with respect to any Acquisition Proposal or Acquisition Inquiry, (iv) approve, endorse or recommend any Acquisition Proposal (subject to Section 7.2 and Section 7.3), (v) execute or enter into any letter of intent or any Contract contemplating or otherwise relating to any Acquisition Transaction, (vi) take any action that could reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry or (vii) publicly propose to do any of the following; provided, however, that, notwithstanding anything contained in this Section 6.4 and subject to compliance with this Section 6.4, prior to obtaining the Parent Stockholder Approval, Parent may furnish nonpublic information regarding Parent and its Subsidiaries to, and enter into discussions or negotiations with, any Person in response to a bona fide written Acquisition Proposal by such Person which the Parent Board determines in good faith, after consultation with its financial advisors and outside legal counsel, constitutes, or is reasonably likely to result in, a Superior Offer (and is not withdrawn) if: (A) neither Parent nor any Representative of Parent shall have breached this Section 6.4 in any material respect, (B) the Parent Board concludes in good faith, after consulting with outside counsel, that the failure to take such action would reasonably be expected to constitute a violation of the Parent Board's fiduciary duties under applicable Law, (C) at least one (1) Business Day prior to initially furnishing any such nonpublic information to, or enter into discussions with, such Person, (D) Parent receives from such Person an executed Acceptable Confidentiality Agreement and (E) at least one (1) Business Day prior to furnishing any such nonpublic information to such Person, Parent furnishes such nonpublic information to the Company (to the extent such information has not been previously furnished by Parent to the Company). Without limiting the generality of the foregoing, each party acknowledges and agrees that, in the event any Representative of such party takes any action that, if taken by such party, would constitute a breach of this Section 6.4 by such party, the taking of such action by such Representative shall be deemed to constitute a breach of this Section 6.4 by such party for purposes of this Agreement.

(b) If any party or any Representative of such party receives an Acquisition Proposal or Acquisition Inquiry at any time during the Pre-Closing Period, then such party shall promptly (and in no event later than one (1) Business Day after such party becomes aware of such Acquisition Proposal or Acquisition Inquiry) advise the other party in writing of such Acquisition Proposal or Acquisition Inquiry (including the identity of the Person making or submitting such Acquisition Proposal or Acquisition Inquiry, and the terms thereof). Such party shall keep the other party reasonably informed with respect to the status and terms of any such Acquisition Proposal or Acquisition Inquiry and any material modification or material proposed modification thereto.

(c) Each party shall immediately cease and cause to be terminated any existing discussions, negotiations and communications with any Person that relate to any Acquisition Proposal or Acquisition Inquiry as of the date of this Agreement and request the destruction or return of any nonpublic information provided to such person as soon as reasonably practicable after the date of this Agreement.

Section 6.5 Notification of Certain Matters. During the Pre-Closing Period, each of the Company, on the one hand, and Parent, on the other hand, shall promptly notify the other (and, if in writing, furnish copies of) if any of the following occurs: (a) any notice or other communication is received from any Person alleging that the consent of such Person is or may be required in connection with any of the transactions contemplated hereby, (b) any Action against or involving or otherwise affecting such party or its Subsidiaries is commenced, or, to the knowledge of such party, threatened against such party or, to the knowledge of such party, any director, officer or employee of such party, (c) such party becomes aware of any inaccuracy in any representation or warranty made by such party in this Agreement or (d) the failure of such party to comply with any covenant or obligation of such party; in each case that could reasonably be expected to make the timely satisfaction of any of the conditions set forth in Article VIII, as applicable, impossible or materially less likely. No such notice shall be deemed to supplement or amend the Company Disclosure Letter or the Parent Disclosure Letter for the purpose of (x) determining the accuracy of any of the representations and warranties made by the Company in this Agreement or (y) determining whether any condition set forth in Article VIII has been satisfied. Any failure by either party to provide notice pursuant to this Section 6.5 shall not be deemed to be a breach for purposes of Section 8.2(b) and Section 8.3(b), as applicable, unless such failure to provide such notice was knowing and intentional.

ARTICLE VII
ADDITIONAL AGREEMENTS

Section 7.1 Registration Statement; Proxy Statement.

(a) As promptly as practicable after the date of this Agreement, (i) Parent shall prepare and file with the SEC a proxy statement relating to the Parent Stockholders Meeting to be held in connection with the Merger (together with any amendments thereof or supplements thereto, the "Proxy Statement") and (ii) Parent, in cooperation with the Company, shall prepare and file with the SEC a registration statement on Form S-4 (the "Form S-4"), in which the Proxy Statement shall be included as a part (the Proxy Statement and the Form S-4, collectively, the "Registration Statement"), in connection with the registration under the Securities Act of the shares of Parent Common Stock to be issued by virtue of the Merger. Parent shall use its reasonable best efforts to (i) cause the Registration Statement to comply with the applicable rules and regulations promulgated by the SEC, (ii) cause the Registration Statement to become effective as promptly as practicable, and (iii) respond promptly to any comments or requests of the SEC or its staff relating to the Registration Statement. Parent shall take all or any action required under any applicable federal, state, securities and other Laws in connection with the issuance of shares of Parent Common Stock pursuant to the Merger. Each of the parties shall reasonably cooperate with the other party and furnish all information concerning itself and their Affiliates, as applicable, to the other parties that is required by law to be include in the Registration Statement as the other parties may reasonably request in connection with such actions and the preparation of the Registration Statement.

(b) Parent covenants and agrees that the Registration Statement (and the letter to stockholders, notice of meeting and form of proxy included therewith) will (i) comply as to form in all material respects with the requirements of applicable U.S. federal securities laws and the DGCL, and (ii) will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Company covenants and agrees that the information supplied by or on behalf of the Company, concerning itself, to Parent for inclusion in the Registration Statement (including the Company Interim Financial Statements) will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make such information, in light of the circumstances under which they were

made, not misleading. Notwithstanding the foregoing, neither party makes any covenant, representation or warranty with respect to statements made in the Registration Statement (and the letter to stockholders, notice of meeting and form of proxy included therewith), if any, based on information provided by the other party or any of their Representatives regarding such other party or its Affiliates for inclusion therein.

(c) Parent shall cause the Proxy Statement to be mailed to Parent's stockholders as promptly as practicable after the Registration Statement is declared effective under the Securities Act.

(d) If at any time before the Effective Time (i) any party (A) becomes aware of any event or information that, pursuant to the Securities Act or the Exchange Act, should be disclosed in an amendment or supplement to the Registration Statement, (B) receives notice of any SEC request for an amendment or supplement to the Registration Statement or for additional information related thereto, or (C) receives SEC comments on the Registration Statement, or (ii) the information provided in the Registration Statement has become "stale" and new information should be disclosed in an amendment or supplement to the Registration Statement; then, in each case such party, as the case may be, shall promptly inform the other parties thereof and shall cooperate with such other parties in filing such amendment or supplement with the SEC (and, if appropriate, in mailing such amendment or supplement to the Parent stockholders) or otherwise addressing such SEC request or comments and each party shall use their commercially reasonable efforts to cause any such amendment to become effective, if required. Parent shall promptly notify the Company if it becomes aware (1) that the Registration Statement has become effective, (2) of the issuance of any stop order or suspension of the qualification or registration of the Parent Common Stock issuance in connection with the Merger for offering or sale in any jurisdiction, or

(3) any order of the SEC related to the Registration Statement, and shall promptly provide to the Company copies of all written correspondence between it or any of its Representatives, on the one hand, and the SEC or staff of the SEC, on the other hand, with respect to the Registration Statement and all orders of the SEC relating to the Registration Statement.

(e) The Company shall reasonably cooperate with Parent and provide, and cause its Representatives to provide, Parent and its Representatives, with all true, correct and complete information regarding the Company that is required by law to be included in the Registration Statement or reasonably requested by Parent to be included in the Registration Statement. Without limiting the Company's obligations in Section 7.1(a), the Company will use commercially reasonable efforts to cause to be delivered to Parent a letter of the Company's independent accounting firm, dated no more than two (2) Business Days before the date on which the Registration Statement becomes effective (and reasonably satisfactory in form and substance to Parent), that is customary in scope and substance for letters delivered by independent public accountants in connection with registration statements similar to the Registration Statement.

(f) The Company and its legal counsel shall be given reasonable opportunity to review and comment on the Registration Statement, including all amendments and supplements thereto, prior to the filing thereof with the SEC, and on the response to any comments of the SEC on the Registration Statement, prior to the filing thereof with the SEC. No filing of, or amendment or supplement to, the Registration Statement will be made by Parent, and no filing of, or amendment or supplement to, the Registration Statement will be made by Parent, in each case, without the prior consent of the Company, which shall not be unreasonably withheld, conditioned or delayed.

(g) As promptly as reasonably practicable following the date of this Agreement the Company will use commercially reasonable efforts to furnish to Parent audited financial statements for each of its fiscal years required to be included in the Form S-4 (the "Company Audited Financial Statements") and the Company will use commercially reasonable efforts to furnish to Parent unaudited interim financial statements for each interim period completed prior to Closing that would be required to be included in the Proxy Statement or any periodic report due prior to the Closing if the Company were subject to the periodic reporting requirements under the Securities Act or the Exchange Act (the "Company Unaudited Interim Financial Statements"). Each of the

Company Audited Financial Statements and the Company Interim Financial Statements will be suitable for inclusion in the Proxy Statement and prepared in accordance with GAAP as applied on a consistent basis during the periods involved (except in each case as described in the notes thereto).

Section 7.2 Company Stockholder Approval.

(a) Promptly after the Registration Statement has been declared effective under the Securities Act and the prospectus related thereto has been filed and distributed, and in any event no later than two (2) Business Days thereafter, the Company shall solicit for approval the Company Stockholder Approval. Under no circumstances shall the Company assert that any other approval or consent is necessary by its stockholders to approve this Agreement and the transaction contemplated herein.

(b) Reasonably promptly following receipt of the Company Stockholder Approval, the Company shall prepare and mail a notice (the "Stockholder Notice") to every stockholder of the Company that did not execute a written consent with respect to the Company Stockholder Approval. The Stockholder Notice shall (i) be a statement to the effect that the Company Board determined that the Merger is advisable in accordance with Section 251(b) of the DGCL and in the best interests of the stockholders of the Company and approved and adopted this Agreement, the Merger and the other transactions contemplated hereby and (ii) provide the stockholders of the Company to whom it is sent with notice of the availability of appraisal rights and notice of the actions taken in the Company Stockholder Approval, including the adoption and approval of this Agreement, the Merger and the other transactions contemplated hereby in accordance with Sections 228(e) and 262 of the DGCL and the organizational documents of the Company. Parent and its counsel shall be given reasonable opportunity to review and comment on all materials (including any amendments thereto) submitted to the stockholders of the Company in accordance with this Section 7.2(b).

(c) The Company agrees that, subject to Section 7.2(d): (i) the Company Board shall recommend that the Company's stockholders vote to adopt and approve this Agreement and the transactions contemplated hereby and shall use commercially reasonable efforts to solicit such approval within the time set forth in Section 7.2(a) (the recommendation of the Company board that the Company's stockholders vote to adopt and approve this Agreement being referred to as the "Company Board Recommendation") and (ii) the Company Board Recommendation shall not be withdrawn or modified (and the Company Board shall not publicly propose to withdraw or modify the Company Board Recommendation) in a manner adverse to Parent, and no resolution by the Company Board or any committee thereof to withdraw or modify the Company Board Recommendation in manner adverse to Parent or to adopt, approve or recommend (or publicly adopt, approve or recommend) any Acquisition Proposal shall be adopted or proposed (the actions set forth in the foregoing clause (ii), collectively, a "Company Board Adverse Recommendation Change").

(d) Notwithstanding anything to the contrary contained in Section 7.2(c), and subject to compliance with Section 6.4 and 7.2, at any time prior to the receipt of the Company Stockholder Approval, (i) the Company receives a bona fide written Superior Offer or (ii) as a result of a material development or change in circumstances (other than any such event, development or change to the extent related to (A) any Acquisition Proposal, Acquisition Inquiry, Acquisition Transaction or the consequences thereof or (B) the fact, in and of itself, that the Company meets or exceeds internal budgets, plans or forecasts of its revenues, earnings or other financial performance or results of operations) that affects the business, assets or operations of the Company that occurs or arises after the date of this Agreement (a "Company Intervening Event"), the Company Board may make a Company Board Adverse Recommendation Change if, but only if (i) in the case of a Superior Offer, following the receipt of and on account of such Superior Offer, (1) the Company Board determines in good faith, after consulting with outside legal counsel, that the failure to withhold, amend, withdraw or modify such recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law, (2) the Company has, and has caused its financial advisors and outside legal counsel to, during the Company Notice Period, negotiate with Parent in good faith to make such adjustments to the terms and conditions of this Agreement so that such Acquisition Proposal ceases to constitute a Superior Offer (to the extent Parent desires to

negotiate) and (3) if after Parent shall have delivered to the Company an irrevocable written offer to alter the terms or conditions of this Agreement during the Company Notice Period, the Company Board shall have determined in good faith, based on the advice of its outside legal counsel, that the failure to withhold, amend, withdraw or modify the Company Board Recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law (after taking into account such alterations of the terms and conditions of this Agreement); provided that (x) Parent receives written notice from the Company confirming that the Company Board has determined to change its recommendation at least four (4) Business Days in advance of the Company Board Adverse Recommendation Change (the "Company Notice Period"), which notice shall include a description in reasonable detail of the reasons for such Company Board Adverse Recommendation Change, and written copies of any relevant proposed transaction agreements with any party making a potential Superior Offer, (y) during any Company Notice Period, Parent shall be entitled to deliver to the Company one or more counterproposals to such Acquisition Proposal and the Company will, and cause its Representatives to, negotiate with Parent in good faith (to the extent Parent desires to negotiate) to make such adjustments in the terms and conditions of this Agreement so that the applicable Acquisition Proposal ceases to constitute a Superior Offer and (z) in the event of any material amendment to any Superior Offer (including any revision in the amount, form or mix of consideration or percentage of the combined company that the Company's stockholders would receive as a result of such potential Superior Offer), the Company shall be required to provide Parent with notice of such material amendment and the Company Notice Period shall be extended, if applicable, to ensure that at least two (2) Business Days remain in the Company Notice Period following such notification during which the parties shall comply again with the requirements of this Section 7.2(d) and the Company Board shall not make a Company Board Adverse Recommendation Change prior to the end of such Company Notice Period as so extended (it being understood that there may be multiple extensions) or (ii) in the case of a Company Intervening Event, the Company promptly notifies Parent, in writing, within the Company Notice Period before making a Company Board Adverse Recommendation Change, which notice shall state expressly the material facts and circumstances related to the applicable Company Intervening Event and that the Company Board intends to make a Company Board Adverse Recommendation Change.

Section 7.3 Parent Stockholders' Meeting.

(a) Parent shall take all action necessary under applicable Law to call, give notice of and hold a meeting of the holders of Parent Common Stock (the "Parent Stockholder Meeting") to present one or more proposals to the stockholders in order to obtain the Parent Stockholder Approval, including the Nasdaq Issuance Proposal, Equity Plan Proposal and the Charter Amendment Proposals, and such other proposals that Parent and the Company may mutually agree upon (the "Parent Stockholder Proposals"). The Parent Stockholder Meeting shall be held as promptly as practicable after the Registration Statement is declared effective under the Securities Act, and in any event no later than forty-five (45) days after the effective date of the Registration Statement. Parent shall take reasonable measures to ensure that all proxies solicited in connection with the Parent Stockholder Meeting are solicited in compliance with all applicable Law. Notwithstanding anything to the contrary contained herein, if on the date of the Parent Stockholder Meeting, or a date preceding the date on which the Parent Stockholder Meeting is scheduled, Parent reasonably believes that (i) it will not receive proxies sufficient to obtain the Parent Stockholder Approvals, whether or not a quorum would be present or (ii) it will not have sufficient shares of Parent Common Stock represented (whether in person or by proxy) to constitute a quorum necessary to conduct the business of the Parent Stockholder Meeting, Parent may postpone or adjourn, or make one or more successive postponements or adjournments of, the Parent Stockholder Meeting as long as the date of the Parent Stockholder Meeting is not postponed or adjourned more than an aggregate of thirty (30) days in connection with any postponements or adjournments. If on the date of the Parent Stockholder Meeting, or a date preceding the date on which the Parent Stockholder Meeting is scheduled, the parties are unable to negotiate an agreed upon determination of Net Cash or pursuant to Section 3.7, Parent will postpone or adjourn, or make one or more successive postponements or adjournments of, the Parent Stockholder Meeting as long as the date of the Parent Stockholder Meeting is not postponed or adjourned more than an aggregate of 30 calendar days in connection with any postponements or adjournments.

(b) Parent agrees that, subject to Section 7.3(c), (i) the Parent Board shall recommend that the holders of Parent Common Stock vote to approve the Parent Stockholder Proposals and shall solicit such approval within the timeframe set forth in Section 7.3(a) above and (ii) the Proxy Statement shall include a statement to the effect that the Parent Board recommends that Parent's stockholders vote to approve the Parent Stockholder Proposals (the recommendation of the Parent Board being referred to as the "Parent Board Recommendation") and (iii) the Parent Board Recommendation shall not be withheld, amended, withdrawn or modified (and the Parent Board shall not publicly propose to withhold, amend, withdraw or modify the Parent Board Recommendation) in a manner adverse to the Company, and no resolution by the Parent Board or any committee thereof to withdraw or modify the Parent Board Recommendation in a manner adverse to the Company or to adopt, approve or recommend (or publicly propose to adopt, approve or recommend) any Acquisition Proposal shall be adopted or proposed (the actions set forth in the foregoing clause (iii), collectively, a "Parent Board Adverse Recommendation Change").

(c) Notwithstanding anything to the contrary contained in Section 7.3(b), and subject to compliance with Section 6.4 and Section 7.3, at any time prior to the approval of the Parent Stockholder Proposals by the Parent Stockholder Approval, (i) Parent receives a bona fide written Superior Offer or (ii) as a result of a material development or change in circumstances (other than any such event, development or change to the extent related to (A) any Acquisition Proposal, Acquisition Inquiry, Acquisition Transaction or the consequences thereof or (B) the fact, in and of itself, that Parent meets or exceeds internal budgets, plans or forecasts of its revenues, earnings or other financial performance or results of operations) that affects the business, assets or operations of Parent that occurs or arises after the date of this Agreement (a "Parent Intervening Event"), the Parent Board may make a Parent Board Adverse Recommendation Change if, but only if (i) in the case of a Superior Offer, following the receipt of and on account of such Superior Offer, (1) the Parent Board determines in good faith, after consulting with outside legal counsel, that the failure to withhold, amend, withdraw or modify such recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law, (2) Parent has, and has caused its financial advisors and outside legal counsel to, during the Parent Notice Period, negotiate with the Company in good faith to make such adjustments to the terms and conditions of this Agreement so that such Acquisition Proposal ceases to constitute a Superior Offer (to the extent the Company desires to negotiate) and (3) if after the Company shall have delivered to Parent an irrevocable written offer to alter the terms or conditions of this Agreement during the Parent Notice Period, the Parent Board shall have determined in good faith, based on the advice of its outside legal counsel, that the failure to withhold, amend, withdraw or modify the Parent Board Recommendation would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law (after taking into account such alterations of the terms and conditions of this Agreement); provided that (x) the Company receives written notice from Parent confirming that the Parent Board has determined to change its recommendation at least four (4) Business Days in advance of the Parent Board Adverse Recommendation Change (the "Parent Notice Period"), which notice shall include a description in reasonable detail of the reasons for such Parent Board Adverse Recommendation Change, and written copies of any relevant proposed transaction agreements with any party making a potential Superior Offer, (y) during any Parent Notice Period, the Company shall be entitled to deliver to Parent one or more counterproposals to such Acquisition Proposal and Parent will, and cause its Representatives to, negotiate with the Company in good faith (to the extent the Company desires to negotiate) to make such adjustments in the terms and conditions of this Agreement so that the applicable Acquisition Proposal ceases to constitute a Superior Offer and (z) in the event of any material amendment to any Superior Offer (including any revision in the amount, form or mix of consideration or percentage of the combined company that Parent's stockholders would receive as a result of such potential Superior Offer), Parent shall be required to provide the Company with notice of such material amendment and the Parent Notice Period shall be extended, if applicable, to ensure that at least two (2) Business Days remain in the Parent Notice Period following such notification during which the parties shall comply again with the requirements of this Section 7.3(c) and the Parent Board shall not make a Parent Board Adverse Recommendation Change prior to the end of such Parent Notice Period as so extended (it being understood that there may be multiple extensions) or (ii) in the case of a Parent Intervening Event, Parent promptly notifies the Company, in writing, within the Parent Notice Period before making a Parent Board Adverse Recommendation

Change, which notice shall state expressly the material facts and circumstances related to the applicable Parent Intervening Event and that the Parent Board intends to make a Parent Board Adverse Recommendation Change.

(d) Parent's obligation to call, give notice of and hold the Parent Stockholder meeting in accordance with Section 7.3(a) shall not be limited to or otherwise affected by the commencement, disclosure, announcement or submission of any Superior Offer or Acquisition Proposal, or by any withdrawal or modification of the Parent Board Recommendation or any Parent Board Adverse Recommendation Change.

(e) Nothing contained in this Agreement shall prohibit Parent or the Parent Board from complying with Rules 14d-9 and 14e-2(a) promulgated under the Exchange Act; provided however, that any disclosure made by Parent or the Parent Board pursuant to Rules 14d- 9 and 14e-2(a) shall be limited to a statement that Parent is unable to take a position with respect to the bidder's tender offer unless the Parent Board determines in good faith, after consultation with its outside legal counsel, that such statement would reasonably be expected to be inconsistent with its fiduciary duties under applicable Law.

Section 7.4 Efforts; Regulatory Approvals; Transaction Litigation.

(a) The parties shall use commercially reasonable efforts to consummate the transactions contemplated hereby. Without limiting the generality of the foregoing, each party: (i) shall promptly as practicable and in any event no more than five (5) Business Days after the date of this Agreement, make or cause to be made any filings required of each of them or any of their respective Affiliates under the HSR Act, (ii) shall make all filings and other submissions (if any) and give all notices (if any) required to be made and given by such party in connection with the transactions contemplated hereby, (iii) shall use commercially reasonable efforts to obtain each consent (if any) reasonably required to be obtained (pursuant to any applicable law or Contract, or otherwise) by such party in connection with the transactions contemplated hereby or for such Contract to remain in full force and effect, (iv) shall use commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the transactions contemplated hereby and (v) shall use commercially reasonable efforts to satisfy the conditions precedent to the consummations of this Agreement.

(b) Notwithstanding the generality of the foregoing, each party shall use commercially reasonable efforts to file or otherwise submit, as soon as practicable after the date of this Agreement, all applications, notices, reports and other documents reasonably required to be filed by such party with or otherwise submitted by such party to any Governmental Entity with respect to the transactions contemplated hereby, and to submit promptly any additional information requested by any such Governmental Entity.

(c) Without limiting the generality of the foregoing, Parent shall give Company prompt (but no later than within two (2) Business Days) written notice of any litigation threatened or in writing against Parent and/or its directors relating to this Agreement or the transactions contemplated hereby (the "Transaction Litigation") (including by providing copies of all pleadings with respect thereto) and keep the Company reasonably informed with respect to the status thereof. Parent will (i) give the Company the opportunity to participate in the defense, settlement or prosecution of any Transaction Litigation, (ii) consult with the Company with respect to the defense, settlement and prosecution of any Transaction Litigation, (iii) consider in good faith the Company's advice with respect to such Transaction Litigation, and (iv) will not settle or consent or agree to settle or compromise any Transaction Litigation without the Company's prior written consent (which such consent shall not be unreasonably withheld or delayed).

Section 7.5 Indemnification, Exculpation and Insurance.

(a) From the Effective Time through the sixth (6th) anniversary of the date on which the Effective Time occurs, each of Parent and the Surviving Company shall indemnify and hold harmless each Person who is now, or has been at any time prior to the date hereof, or who becomes prior to the Effective Time, a director or officer of Parent or the Company, respectively (the "D&O Indemnified Parties"), against all claims, losses,

liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys' fees and disbursements, incurred in connection with any claim, Action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to the fact that the D&O Indemnified Party is or was a director or officer of Parent or of the Company, whether asserted or claimed prior to, at or after the Effective Time, in each case, to the fullest extent permitted under the DGCL. Each D&O Indemnified Party will be entitled to advancement of expenses incurred in the defense of any such claim, action, suit, proceeding or investigation from each of Parent and the Surviving Company, jointly and severally, upon receipt by Parent or the Surviving Company from the D&O Indemnified Party of a request therefor; provided, that any such D&O Indemnified Party to whom expenses are advanced provides an undertaking to Parent, to the extent then required by the DGCL, to repay such advances if it is ultimately determined that such D&O Indemnified Party is not entitled to indemnification.

(b) The provisions of the certificate of incorporation and bylaws of Parent with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of Parent that are presently set forth in the certificate of incorporation and bylaws of Parent shall not be amended, modified or repealed for a period of six (6) years from the Effective Time in a manner that would adversely affect the rights thereunder of individuals who, at or prior to the Effective Time, were officers or directors of Parent, unless such modification is required by applicable Law. The certificate of incorporation and bylaws of the Surviving Company shall contain, and Parent shall cause the certificate of incorporation and bylaws of the Surviving Company to so contain, provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers as those presently set forth in the certificate of incorporation and bylaws of Parent.

(c) From and after the Effective Time, (i) the Surviving Company shall fulfill and honor in all respects the obligations of the Company to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under the Company's organizational documents and pursuant to any indemnification agreements between the Company and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the Effective Time and (ii) Parent shall fulfill and honor in all respects the obligations of Parent to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under Parent's organizational documents and pursuant to any indemnification agreements between Parent and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the Effective Time.

(d) From and after the Effective Time, Parent shall maintain directors' and officers' liability insurance policies, with an effective date as of the Closing Date, on commercially available terms and conditions and with coverage limits customary for U.S. public companies similarly situated to Parent. In addition, Parent shall purchase, prior to the Effective Time, a six- year prepaid "D&O tail policy" for the non-cancellable extension of the directors' and officers' liability coverage of Parent's existing directors' and officers' insurance policies for a claims reporting or discovery period of at least six years from and after the Effective Time with terms, conditions, retentions and limits of liability that are no less favorable than the coverage provided under Parent's existing policies as of the date of this Agreement with respect to any actual or alleged error, misstatement, misleading statement, act, omission, neglect, breach of duty or any matter claimed against a director or officer of Parent by reason of him or her serving in such capacity that existed or occurred at or prior to the Effective Time (including in connection with this Agreement or the transactions contemplated hereby or in connection with Parent's initial public offering of shares of Parent Common Stock).

(e) From and after the Effective Time, Parent shall pay all expenses, including reasonable attorneys' fees, that are incurred by the persons referred to in this Section 7.5 in connection with their enforcement of the rights provided to such persons in this Section 7.5.

(f) The provisions of this Section 7.5 are intended to be in addition to the rights otherwise available to the current and former officers and directors of Parent and the Company by Law, charter, statute, bylaw or

agreement, and shall operate for the benefit of, and shall be enforceable by, each of the D&O Indemnified Parties, their heirs and their Representatives.

(g) In the event Parent or the Surviving Company or any of their respective successors or assigns (i) consolidates with or merges into any other Person and shall not be the continuing or surviving company or entity of such consolidation or merger or (ii) transfers all or substantially all of its properties and assets to any Person, then, and in each such case, proper provision shall be made so that the successors and assigns of Parent or the Surviving Company, as the case may be, shall succeed to the obligations set forth in this Section 7.5. Parent shall cause the Surviving Company to perform all of the obligations of the Surviving Company under this Section 7.5.

Section 7.6 Section 16 Matters. Prior to the Effective Time, each of Parent and the Company shall take all such steps as may be necessary or appropriate to cause the acquisitions of Parent Common Stock (including derivative securities with respect to such Parent Common Stock) resulting from the transactions contemplated by this Agreement by each individual who will become subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Parent to be exempt under Rule 16b-3 promulgated under the Exchange Act.

Section 7.7 Disclosure. The parties shall mutually agree to the text of any initial press release and Parent's Form 8-K announcing the execution and delivery of this Agreement. Without limiting any party's obligations under the Confidentiality Agreement, no party shall, and no party shall permit any of its Subsidiaries or any of its Representatives to, issue any press release or make any disclosure (to any customers or employees of such party, to the public or otherwise) regarding the transactions contemplated hereby unless (a) the other party shall have approved such press release or disclosure in writing, such approval not to be unreasonably conditioned, withheld or delayed; or (b) such party shall have determined in good faith, upon the advice of outside legal counsel, that such disclosure is requited by applicable Law and, to the extent practicable, before such press release or disclosure is issued or made, such party advises the other party of, and consults with the other party regarding, the text of such press release or disclosure; provided, however, that each of the Company and Parent may make any public statement in response to specific questions by the press, analysts, investors or those attending industry conferences or financial analyst conference calls, so long as any such statements made by the Company or Parent in compliance with this Section 7.7. Notwithstanding the foregoing, a party need not consult with any other parties pursuant to the specific terms of this Section 7.7 in connection with such portion of any press release, public statement or filing to be issued or made pursuant to Section 7.2(d), Section 7.3(d) or with respect to any Acquisition Proposal, Company Board Adverse Recommendation Change, Parent Board Adverse Recommendation Change, or pursuant to Section 7.3(e).

Section 7.8 Listing. At or prior to the Effective Time, Parent shall use its commercially reasonable efforts to (a) maintain its existing listing on Nasdaq until the Effective Time and to obtain approval of the listing of the combined corporation on Nasdaq, (b) to the extent required by the rules and regulations of Nasdaq, prepare and submit to Nasdaq a notification form for the listing of shares of Parent Common Stock to be issued in connection with the transactions contemplated hereby, and to cause such shares to be approved for listing (subject to official notice of issuance, and (c) to the extent required by Nasdaq Marketplace Rule 5110, assist the Company in preparing and filing an initial listing application for the Parent Common Stock on Nasdaq (the "Nasdaq Listing Application") and to cause such Nasdaq Listing Application to be conditionally approved prior to the Effective Time. Each party will reasonably promptly inform the other party of all verbal or written communications between Nasdaq and such party or its representatives. The parties will use commercially reasonable efforts to coordinate with respect to compliance with Nasdaq rules and regulations. The party not filing the Nasdaq Listing Application will cooperate with the other party as reasonably requested by such filing party with respect to the Nasdaq Listing Application and promptly furnish to such filing party all information concerning itself and its members that may be required or reasonably requested in connection with any action contemplated by this Section 7.8. The Company agrees to pay all Nasdaq fees associated with any action contemplated by this Section 7.8.

Section 7.9 Tax Matters.

(a) Each of Parent, Merger Sub and the Company will (and will cause its respective Affiliates to) (i) use all reasonable best efforts to cause the Merger to constitute as a transaction qualifying for the Intended Tax Treatment and (ii) not take any action, or fail to take any action, that could reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment. Parent shall not file (or cause its Affiliates, including the Company, to file) any U.S. federal, state or local Tax Return after the Closing Date in a manner that is inconsistent with the treatment of the Merger as a transaction qualifying for the Intended Tax Treatment for U.S. federal, state income and other relevant Tax purposes, and shall not take any inconsistent position during the course of any audit, litigation or other proceeding with respect to Taxes, in each case, unless otherwise required by a "determination" within the meaning of Section 1313(a) of the Code.

(b) If, in connection with the preparation and filing of the Registration Statement, the SEC requests or requires that a tax opinion to be prepared and submitted regarding the treatment of the Merger to the stockholders of the Company, Parent and the Company shall deliver to Wilson Sonsini Goodrich & Rosati, P.C. (or other nationally recognized tax counsel) customary Tax representation letters reasonably satisfactory to Wilson Sonsini Goodrich Rosati, P.C., dated and executed as of the date the Registration Statement shall have been declared effective by the SEC and such other date(s) as determined reasonably necessary by Wilson Sonsini Goodrich Rosati, P.C. in connection with the preparation and filing of the Registration Statement, and Wilson Sonsini Goodrich Rosati, P.C. shall furnish an opinion, which will be subject to customary assumptions and limitations, to the effect that the Intended Tax Treatment should apply to the Merger.

(c) All transfer, documentary, sales, use, stamp, registration, excise, recording, registration value added and other such similar Taxes and fees (including any penalties and interest) that become payable in connection with or by reason of the execution of this Agreement and the transactions contemplated hereby ("Transfer Taxes") shall be borne and paid equally by Parent and the Company. Unless otherwise required by applicable law, Parent shall timely file any Tax Return or other document with respect to such Taxes or fees (and the Company shall reasonably cooperate with respect thereto as necessary).

Section 7.10 Directors and Officers. Until successors are duly elected or appointed and qualified in accordance with applicable Law, the parties shall use commercially reasonable efforts to take all necessary actions so that the Persons listed on Sections 2.6(c) and 2.6(d) of the Parent Disclosure Letter are elected or appointed, as applicable, to the positions of officers and directors of Parent and the Surviving Company, as set forth therein, to serve in such positions effective as of the Effective Time. If any Person listed on Sections 2.6(c) and 2.6(d) of the Parent Disclosure Letter is unable or unwilling to serve as officer or director of Parent or the Surviving Company, as set forth therein, the party appointing such Person (as set forth on Sections 2.6(c) and 2.6(d) of the Parent Disclosure Letter) shall designate a successor. The parties shall use reasonable best efforts to have each of the Persons that will serve as directors and officers of the Parent following the Closing to execute and deliver a Lock-Up Agreement prior to Closing.

Section 7.11 Termination of Certain Agreements and Rights.

(a) Except as set forth on Section 7.11 of the Parent Disclosure Letter, each of Parent and the Company shall use commercially reasonable efforts to cause any stockholder agreements, voting agreements, registration rights agreements, co-sale agreements and any other similar Contracts between either Parent or the Company and any holders of Parent Common Stock or Company Capital Stock, respectively, including any such Contract granting any Person investor rights, rights of first refusal, registration rights or director registration rights (collectively, the "Investor Agreements"), to be terminated immediately prior to the Effective Time.

(b) Parent shall terminate all Parent Material Contracts (including all statements of work, work orders, change orders, purchase orders, and any other Contracts thereunder), effective no later than the Closing Date, consistent with the provisions set forth in Section 5.16(d).

(c) Parent shall take all actions as set forth on Section 7.11(c) to the Parent Disclosure Letter.

Section 7.12 Obligations of Merger Sub. Parent will take all action necessary to cause Merger Sub to perform its obligations under this Agreement and to consummate the Merger on the terms and conditions set forth in this Agreement.

Section 7.13 Allocation Certificate. The Company will prepare and deliver to Parent at least two (2) Business Days prior to the Closing Date a certificate signed by an officer of the Company in a form reasonably acceptable to Parent setting forth (as of immediately prior to the Effective Time) (a) each holder of the Company Capital Stock, (b) such holder's name and address,

(c) the number or percentage and type of the Company Capital Stock held as of the Closing Date for each such holder and (d) the number of shares of Parent Common Stock to be issued to such holder pursuant to this Agreement in respect of the Company Capital Stock held by such holder as of immediately prior to the Effective Time (the "Allocation Certificate").

Section 7.14 Cash Dividend.

(a) Prior to the Effective Time, the Parent Board shall set a record date for the Cash Dividend (the "Dividend Record Date"), which date shall be as close as reasonably practicable to (but not later than) the anticipated Closing Date. Parent shall ensure that the declaration of the Dividend Record Date and the payment of the Cash Dividend shall be implemented and performed such that the Parent Net Cash, after taking into account the Cash Dividend, shall be no less than $115,000,000 (the "Minimum Net Cash") as of the Closing, and such that the Closing is not delayed in order to effect the Cash Dividend. The Parent Board shall cause to be paid the Cash Dividend as soon as practicable after the Dividend Record Date, but in any case, not prior to the date upon which the Final Parent Net Cash has been finally determined in accordance with Section 3.7 and not later than 60 days after the Dividend Record Date. Parent shall announce, declare and pay (or cause to be paid) the Cash Dividend in compliance with all applicable Law, including, without limitation, any rule or regulation of Nasdaq applicable to Parent. The amount of the Cash Dividend payable to non-U.S. stockholders of the Parent shall be reduced by any Taxes required to be withheld from such payment (including, for the avoidance of doubt, because at the time of payment it is not known whether Parent will have current or accumulated earnings and profits for U.S. federal income tax purposes in the year in which the Cash Dividend is paid), and any amounts that are deducted or withheld shall be treated as having been paid to the stockholder of Parent in respect of whom such payment was made.

(b) Parent shall cause the Cash Dividend to be $60,000,000, in the aggregate, subject to the following adjustments:

(i) If (x) the Final Parent Net Cash at the Closing exceeds the Parent Target Net Cash, and (y) the Concurrent PIPE Investment Amount is more than $75,000,000, then the Company may direct Parent, in its sole discretion, to, or Parent shall be permitted (with the Company's prior written consent (which such consent shall not be unreasonably withheld, conditioned or delayed)), to increase the amount of the Cash Dividend by an amount not to exceed the lesser of such excess as described in the foregoing clause (y) and $75,000,000.

(ii) If the Final Parent Net Cash at the Closing minus the amount of the Cash Dividend is less than the Minimum Net Cash, Parent shall (unless otherwise requested by the Company) reduce the Cash Dividend by the amount necessary to ensure that the Final Parent Net Cash minus the amount of the Cash Dividend is at least the Minimum Net Cash as of the Closing.

(iii) Other adjustments as may be mutually agreed between Parent and the Company.

(c) For the avoidance of doubt, as reflected in Section 3.1(a)(i)(F) of the Parent Disclosure Letter, the parties agree that the Cash Dividend may be subject to simultaneous adjustments under the foregoing clauses (i) and (ii).

Section 7.15 Parent Equity Plans; Termination of Certain Parent Options.

(a) Prior to the Effective Time, the Parent Board will adopt the 2023 Equity Incentive Plan, subject to the Closing and effective as of the Effective Time, and will include provisions in the Proxy Statement for the stockholders of Parent to approve the 2023 Equity Incentive Plan (the "2023 Equity Incentive Plan Proposal"). Subject to the approval of the 2023 Equity Incentive Plan Proposal by the stockholders of Parent prior to the Effective Time, Parent shall file with the SEC, promptly after the Effective Time and at the Company's expense, a registration statement on Form S-8 (or any successor form), if available for use by Parent, relating to the shares of Parent Common Stock issuable with respect to the 2023 Equity Incentive Plan.

(b) Prior to the Effective Time, the Parent Board will adopt the 2023 ESPP, subject to the Closing and effective as of the Effective Time, and will include provisions in the Proxy Statement for the stockholders of Parent to approve the 2023 ESPP (the "2023 ESPP Proposal", and together with the 2023 Equity Incentive Plan Proposal, the "Equity Plan Proposals"). Subject to the approval of the 2023 ESPP Proposal by the stockholders of Parent prior to the Effective Time, Parent shall file with the SEC, promptly after the Effective Time and at the Company's expense, a registration statement on Form S-8 (or any successor form), if available for use by Parent, relating to the shares of Parent Common Stock issuable with respect to the 2023 ESPP. For the avoidance of doubt, approval of the 2023 Plans by the stockholders of Parent shall not be a condition to Closing.

(c) Prior to the Closing, the Parent Board shall have adopted appropriate resolutions and taken all other actions necessary and appropriate to provide that for outstanding and unexercised Parent Options with a per share exercise price equal to or greater than $3.00 (prior to giving effect to the Cash Dividend and the Nasdaq Reverse Stock Split) (the "Out-of-the-Money Parent Options"), the vesting of each unvested Out-of-the-Money Parent Option shall be accelerated in full effective as of immediately prior to the Effective Time and each such Out-of- the-Money Parent Option not exercised as of immediately prior to the Effective Time shall be cancelled at the Effective Time for no consideration. Prior to the Effective Time, each holder of an Out-of-the-Money Parent Option shall be provided with the opportunity to exercise such holder's Out-of-the-Money Parent Option, for such period determined by the Parent Board that ends on or prior to the tenth (10^{th}) Business Day prior to the Effective Time. Each outstanding and unexercised Parent Option with a per share exercise price less than $3.00 (the "In-the-Money Parent Options") shall continue to be subject to the same terms and conditions after the Effective Time as were applicable under such In-the-Money Parent Option as of immediately prior to the Effective Time.

Section 7.16 Permitted Financing.

(a) Until such time as Parent requests the SEC to accelerate effectiveness of the Registration Statement, Parent shall, upon the request of the Company and subject to applicable securities Laws, execute Permitted Stock Purchase Agreements that would constitute a Permitted Financing and in accordance with Section 7.16(a) of the Parent Disclosure Letter; provided that, other than to the extent reasonably requested by the Company and agreed by Parent (which such agreement shall not be unreasonably withheld, conditioned or delayed), each Permitted Stock Purchase Agreement shall be in substantially the form of the Subscription Agreement. Parent shall provide the Company at least two (2) Business Days' written notice prior to the execution of each Permitted Stock Purchase Agreement, which such execution shall be subject to the prior consent of the Company (such consent not to be unreasonably withheld, conditioned or delayed). For the avoidance of doubt, to the extent any Permitted Financing is conducted or consummated by Parent, it shall for all purposes under this Agreement be considered as part of the Concurrent PIPE Investment and be offered at the same price per share of Parent Common Stock as the Concurrent PIPE Investment.

(b) Prior to the earlier of the Closing and the termination of this Agreement pursuant to Section 9.1, each of Parent and the Company agree, and shall cause their respective officers and employees, to use commercially reasonable efforts to cooperate in connection with the arrangement of any Permitted Financing as may be reasonably requested by the other party.

(c) At the Closing, assuming Parent's full compliance with the requirements set forth in this Section 7.16, Parent shall be permitted to consummate the Permitted Financing, and issue the equity contemplated thereunder, in accordance with the terms and conditions of the Permitted Stock Purchase Agreements.

Section 7.17 Legends. Parent shall be entitled to place appropriate legends on the book entries and/or certificates evidencing any shares of Parent Common Stock to be received in the Merger by equityholders of the Company who may be considered "affiliates" of Parent for purposes of Rules 144 and 145 under the Securities Act reflecting the restrictions set forth in Rules 144 and 145 and to issue appropriate stop transfer instructions to the transfer agent for Parent Common Stock.

ARTICLE VIII
CLOSING CONDITIONS

Section 8.1 Conditions Precedent of each Party. The obligations of each party to effect the Merger and otherwise consummate the transactions contemplated hereby to be consummated at the Closing are subject to the satisfaction or, to the extent permitted by applicable Law, the written waiver by each of the parties, at or prior to the Closing, of each of the following conditions:

(a) The Registration Statement shall have become effective in accordance with the provisions of the Securities Act, and shall not be subject to any stop order or proceeding seeking a stop order with respect to the Registration Statement and has not been withdrawn.

(b) Any applicable waiting periods (or any extensions thereof) under the HSR Act shall have expired or otherwise been terminated.

(c) No temporary restraining order, preliminary or permanent injunction or other Order preventing the consummation of the transactions contemplated hereby shall have been issued by any court of competent jurisdiction or other Governmental Entity of competent jurisdiction and remain in effect and there shall not be any Law which has the effect of making the consummation of the transactions contemplated hereby illegal.

(d) (i) Parent shall have obtained the Parent Stockholder Approval and (ii) the Company shall have obtained the Company Stockholder Approval.

(e) The Lock-Up Agreements will continue to be in full force and effect as of immediately following the Effective Time.

(f) The Subscription Agreement evidencing the Concurrent PIPE Investment shall be in full force and effect and cash proceeds of not less than $50,000,000 (in combination with any proceeds from a Permitted Financing), which gross proceeds will be received by the Surviving Company immediately prior to or following the Closing in connection with the consummation of the transactions contemplated by the Subscription Agreement or any Permitted Financing.

(g) (i) The approval of the listing of the additional shares pursuant to the Nasdaq Listing Application shall have been approved for listing (subject to official notice of issuance) on Nasdaq and (ii) Parent has maintained its existing listing on Nasdaq and obtained approval of the listing of the combined corporation on Nasdaq.

Section 8.2 Conditions Precedent to Obligation of the Company. The obligations of the Company to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the satisfaction or the written waiver by the Company, at or prior to the Closing, of each of the following conditions:

(a) Accuracy of Representations. The representations and warranties of Parent and Merger Sub made in this Agreement (other than the Parent Fundamental Representations) shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on and as of the Closing Date except (a) in each case, or in the aggregate, where the failure to be so true and correct would not reasonably be expected to have a Parent Material Adverse Effect (without giving effect to any references therein to any Parent Material Adverse Effect or other materiality qualifications) or (v) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date) (it being understood that, for purposes of determining the accuracy of such representations and warranties, any update of or modification to the Parent Disclosure Letter made or purported to have been made after the date of this Agreement shall be disregarded). The Parent Fundamental Representations shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on and as of such date, except, in each case, (x) in respect of Section 5.2, for such inaccuracies which are de minimis in the aggregate or (y) for those representations and warranties which address matters only as of a particular date (which representations and warranties shall have been true and correct, subject to the qualifications as set forth in the preceding clause (x), as of such particular date).

(b) Performance of Covenants. Parent shall have performed or complied with in all material respects all agreements and covenants required to be performed or complied with by it under this Agreement at or prior to the Effective Time.

(c) No Parent Material Adverse Effect. Since the date of this Agreement, there shall not have occurred any Parent Material Adverse Effect.

(d) Documents. The Company shall have received the following documents, each of which shall be in full force and effect:

(i) a certificate executed by an officer of Parent certifying that the conditions set forth in Section 8.2(a), (b) and (c) have been duly satisfied; and

(ii) written resignations in forms reasonably satisfactory to the Company, dated as of the Closing Date and effective as of the Closing executed by the officers and directors of Parent who are not to continue as officers or directors of Parent pursuant to Section 7.10.

(e) Net Cash. At the Closing, the Final Parent Net Cash minus the amount of the Cash Dividend shall be no less than the Minimum Net Cash; provided, that if Final Parent Net Cash minus the amount of the Cash Dividend is less than the Minimum Net Cash, then the terms of this Section 8.2(e) may be satisfied by reducing the Cash Dividend pursuant to Section 7.14.

(f) Lease Mitigations. Each of the Parent Lease Mitigation Agreements shall have been fully executed and performance shall have been completed thereunder.

(g) Form 10-K. Parent shall have filed with the SEC its Form 10-K for the year ended December 31, 2023, including all required audited financial statements in connection therewith, and the information required to be included therein by Part III of Form 10-K, in form and substance and in full compliance with, and within the time period required by, applicable Law, provided that, if the Closing occurs prior to December 31, 2023, then this condition shall not be a condition to the obligations of the Company pursuant to this Section 8.2.

Section 8.3 Conditions Precedent of Parent and Merger Sub. The obligations of Parent and Merger Sub to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the satisfaction or the written waiver by Parent, at or prior to the Closing, of each of the following conditions:

(a) Accuracy of Representations. The representations and warranties of the Company made in this Agreement (other than the Company Fundamental Representations) shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on and as of the Closing Date except (a) in each case, or in the aggregate, where the failure to be so true and correct would not reasonably be expected to have a Material Adverse Effect (without giving effect to any references therein to any Material Adverse Effect or other materiality qualifications) or (b) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date) (it being understood that, for purposes of determining the accuracy of such representations and warranties, any update of or modification to the Company Disclosure Letter made or purported to have been made after the date of this Agreement shall be disregarded). The Company Fundamental Representations shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on and as of such date, except, in each case, (x) in respect of Section 4.2, for such inaccuracies which are de minimis in the aggregate, (y) for those representations and warranties which address matters only as of a particular date (which representations and warranties shall have been true and correct, subject to the qualifications as set forth in the preceding clause (x), as of such particular date), or (z) variances arising solely due to the transactions contemplated under the Subscription Agreement.

(b) Performance of Covenants. The Company shall have performed or complied with in all material respects all agreements and covenants required to be performed or complied with by it under this Agreement at or prior to the Effective Time.

(c) No Material Adverse Effect. Since the date of this Agreement, there shall not have occurred any Material Adverse Effect.

(d) Closing Certificate. Parent shall have received a certificate executed by an officer of the Company certifying (a) that the conditions set forth in Section 8.3(a), (b), and (c) have been duly satisfied and (b) that the information set forth in the Allocation Certificate delivered by the Company in accordance with Section 7.13 is true and accurate in all respects as of the Closing Date.

(e) FIRPTA Certificate. Parent shall have received from the Company a certificate in the form and substance required under Treasury Regulations Sections 1.1445-2(c) and 1.897-2(h) together with a form of notice to the IRS in accordance with the requirements of Treasury Regulations Section 1.897-2(h), in each case, in form and substance reasonably acceptable to Parent.

ARTICLE IX
TERMINATION

Section 9.1 Termination. This Agreement may be terminated prior to the Effective Time (whether before or after the adoption of this Agreement by the Company's stockholders and whether before or after approval of the Parent Stockholder Proposals by Parent's stockholders, unless otherwise specified below):

(a) by mutual consent of Parent and the Company;

(b) by either Parent or the Company if the Merger shall not have been consummated by June 14, 2024 (subject to possible extension as provided in this Section 9.1(b), the "End Date"); provided, however, that the right to terminate this Agreement under this Section 9.1(b) shall not be available to the Company or Parent if

such party's (or in the case of Parent, Merger Sub's) action or failure to act has been a principal cause of the failure of the Merger to occur on or before the End Date and such action or failure to act constitutes a breach of this Agreement, provided, further, however, that, in the event that the SEC has not declared effective under the Securities Act the Registration Statement by the date which is 60 days prior to the End Date, then either the Company or Parent shall be entitled to extend the End Date for an additional 60 days;

(c) by either Parent or the Company if a court of competent jurisdiction or other Governmental Entity shall have issued a final and nonappealable order, or shall have taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the transactions contemplated hereby;

(d) by Parent if the Company Stockholder Approval shall not have been obtained by written consent of the Company's stockholders in lieu of a meeting within two (2) Business Days of the Registration Statement becoming effective in accordance with the provisions of the Securities Act; provided, however, that once the Company Stockholder Approval has been obtained, Parent may not terminate this Agreement pursuant to this Section 9.1(d);

(e) by either Parent or the Company if (i) the Parent Stockholder Meeting (including any adjournments and postponements thereof) shall have been held and completed and Parent's stockholders shall have taken a final vote on the Parent Stockholder Proposals and (ii) the Parent Stockholder Approval shall not have been obtained at the Parent Stockholder Meeting (or any adjournment or postponement thereof); provided, however, that the right to terminate this Agreement under this Section 9.1(e) shall not be available to Parent where the failure to obtain the Parent Stockholder Approval shall have been caused by the action or failure to act of Parent and such action or failure to act constitutes a material breach by Parent of this Agreement;

(f) by the Company (at any time prior to obtaining the Parent Stockholder Approval) if any Parent Triggering Event shall have occurred;

(g) by Parent (at any time prior to obtaining the Company Stockholder Approval) if any Company Triggering Event shall have occurred;

(h) by the Company, upon a breach of any representation, warranty, covenant or agreement set forth in this Agreement by Parent or Merger Sub or if any representation or warranty of Parent or Merger Sub shall have become inaccurate, in either case, such that the conditions set forth in Section 8.2(a) or Section 8.2(b) would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; provided that the Company is not then in material breach of any representation, warranty, covenant or agreement under this Agreement; provided, further that if such inaccuracy in Parent's or Merger Sub's representations and warranties or breach by Parent or Merger Sub is curable by Parent or Merger Sub, then this Agreement shall not terminate pursuant to this Section 9.1(h) as a result of such particular breach or inaccuracy until the earlier of (i) the expiration of a 30-day period commencing upon delivery of written notice from the Company to Parent or Merger Sub of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(h) and (ii) Parent or Merger Sub (as applicable) ceasing to exercise commercially reasonable efforts to cure such breach following delivery of written notice from the Company to Parent or Merger Sub of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(h) (it being understood that this Agreement shall not terminate pursuant to this Section 9.1(h) as a result of such particular breach or inaccuracy if such breach by Parent or Merger Sub is cured prior to such termination becoming effective); or

(i) by the Parent, upon a breach of any representation, warranty, covenant or agreement set forth in this Agreement by the Company or if any representation or warranty of Parent or Merger Sub shall have become inaccurate, in either case, such that the conditions set forth in Section 8.2(a) or Section 8.2(b) would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; provided that Parent is not then in material breach of any representation, warranty, covenant or agreement under this Agreement; provided, further that if such inaccuracy in the Company's representations and

warranties or breach by the Company is curable by the Company, then this Agreement shall not terminate pursuant to this Section 9.1(i) as a result of such particular breach or inaccuracy until the earlier of (i) the expiration of a 30-day period commencing upon delivery of written notice from the Parent to the Company of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(i) and (ii) the Company ceasing to exercise commercially reasonable efforts to cure such breach following delivery of written notice from Parent to the Company of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(i) (it being understood that this Agreement shall not terminate pursuant to this Section 9.1(i) as a result of such particular breach or inaccuracy if such breach by the Company is cured prior to such termination becoming effective).

The party desiring to terminate this Agreement pursuant to this Section 9.1 (other than pursuant to Section 9.1(a)) shall give a notice of such termination to the other party specifying the provisions hereof pursuant to which such termination is made and the basis therefor described in reasonable detail.

Section 9.2 Effect of Termination. In the event of the termination of this Agreement as provided in Section 9.1, this Agreement shall be of no further force or effect; provided, however, that (a) this Section 9.2, Section 9.3 and Article X (and the related definitions of the defined terms in such section) shall survive the termination of this Agreement and shall remain in full force and effect and (b) the termination of this Agreement and the provisions of Section 9.3 shall not relieve any party of any liability for fraud or for any willful and material breach of any representation, warranty, covenant, obligation or other provision contained in this Agreement.

Section 9.3 Expenses; Termination Fees.

(a) Except as set forth in this Section 9.3 all fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such expenses, whether or not the Merger is consummated, provided however, that the Company shall pay the fees associated with the Nasdaq Listing Application and any filing fees pursuant to Section 7.4(a) and Section 7.4(b) and Parent shall pay, among other things, all other costs, fees, and expenses incurred in relation to the printing and filing with the SEC of the Registration Statement (including any financial statements and exhibits) and any amendments or supplements thereto and paid to a financial printer or the SEC.

(b) If (i) this Agreement is terminated by Parent or the Company pursuant to Section 9.1(e) or by the Company pursuant to Section 9.1(h), (ii) at any time after the date of this Agreement and prior to the Parent Stockholder Meeting an Acquisition Proposal with respect to Parent shall have been publicly announced, disclosed or otherwise communicated to the Parent Board (and shall not have been withdrawn) and (iii) within twelve (12) months after the date of such termination, Parent enters into a definitive agreement with respect to a Subsequent Transaction or consummates a Subsequent Transaction, then Parent shall pay the Company, upon such entry into a definitive agreement and/or consummation of a Subsequent Transaction, a nonrefundable fee in an amount equal to $7,500,000 (the "Termination Fee"). If this Agreement is terminated by the Company pursuant to Section 9.1(f) (or, at the time this Agreement is terminated, the Company had the right to terminate this Agreement pursuant to Section 9.1(f)), then Parent shall pay to the Company, within five (5) Business Days of such termination the Termination Fee.

(c) If (i) this Agreement is terminated by Parent pursuant to Section 9.1(d) or Section 9.1(i), (ii) at any time after the date of this Agreement and before obtaining the Company Stockholder Approval, an Acquisition Proposal with respect to the Company shall have been publicly announced, disclosed or otherwise communicated to the Company Board (and shall not have been withdrawn) and (iii) within twelve (12) months after the date of such termination, the Company enters into a definitive agreement with respect to a Subsequent Transaction or consummates a Subsequent Transaction, then the Company shall pay to Parent, upon such entry into a definitive agreement and/or consummation of a Subsequent Transaction, an amount equal to the Termination Fee.

(d) If this Agreement is terminated by Parent pursuant to Section 9.1(g) (or, at the time this Agreement is terminated, Parent had the right to terminate this Agreement pursuant to Section 9.1(g)), then Company shall pay to Parent, within five (5) Business Days of such termination the Termination Fee.

(e) If either party fails to pay when due any amount payable by it under this Section 9.3, then (i) such party shall reimburse the other party for reasonable costs and expenses (including reasonable fees and disbursements of counsel) incurred in connection with the collection of such overdue amount and the enforcement by the other party of its rights under this Section 9.3 and (ii) such party shall pay to the other party interest on such overdue amount (for the period commencing as of the date such overdue amount was originally required to be paid and ending on the date such overdue amount is actually paid to the other party in full) at a rate per annum equal to the "prime rate" (as announced by Bank of America or any successor thereto) in effect on the date such overdue amount was originally required to be paid plus three percent.

(f) The parties agree that, subject to Section 9.2, the payment of fees and expenses set forth in this Section 9.3 shall be the sole and exclusive remedy of each party following a termination of this Agreement under the circumstances described in this Section 9.3, it being understood that in no event shall either Parent or the Company be required to pay the individual fees or damages payable pursuant to this Section 9.3 on more than one occasion. Subject to Section 9.2, following the payment of the fees and expenses set forth in this Section 9.3 by a party, (i) such party shall have no further liability to the other party in connection with or arising out of this Agreement or the termination thereof, any breach of this Agreement by the other party giving rise to such termination, or the failure of the transactions contemplated hereby to be consummated, (ii) no other party or their respective Affiliates shall be entitled to bring or maintain any other claim, action or proceeding against such party or seek to obtain any recovery, judgment or damages of any kind against such party (or any partner, member, stockholder, director, officer, employee, Subsidiary, Affiliate, agent or other Representative of such party) in connection with or arising out of this Agreement or the termination thereof, any breach by such party giving rise to such termination or the failure of the transactions contemplated hereby to be consummated and (iii) all other parties and their respective Affiliates shall be precluded from any other remedy against such party and its Affiliates, at law or in equity or otherwise, in connection with or arising out of this Agreement or the termination thereof, any breach by such party giving rise to such termination or the failure of the transactions contemplated hereby to be consummated. Each of the parties acknowledges that (x) the agreements contained in this Section 9.3 are an integral part of the transactions contemplated hereby, (y) without these agreements, the parties would not enter into this Agreement and (z) any amount payable pursuant to this Section 9.3 is not a penalty, but rather is liquidated damages in a reasonable amount that will compensate the parties in the circumstances in which such amount is payable; provided, however, that nothing in this Section 9.3(f) shall limit the rights of the parties under Section 10.3.

ARTICLE X
GENERAL PROVISIONS

Section 10.1 Non-survival of Representations and Warranties. None of the representations, warranties, covenants or agreements in this Agreement or in any instrument delivered pursuant to this Agreement shall survive the Effective Time, other than those covenants or agreements of the parties which by their terms apply, or are to be performed in whole or in part, after the Effective Time.

Section 10.2 Amendment or Supplement. This Agreement may be amended, modified or supplemented by the parties by action taken or authorized by their respective Boards of Directors at any time, whether before or after Company Stockholder Approval or the Parent Stockholder Approval has been obtained; provided, however, that after the Company Stockholder Approval or the Parent Stockholder Approval has been obtained, no amendment shall be made that pursuant to applicable Law requires further approval or adoption by the stockholders of the Company or Parent, as applicable, without such further approval or adoption. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise,

except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each of the parties in interest at the time of the amendment.

Section 10.3 Waiver. The parties may, by action taken or authorized by their respective Boards of Directors, to the extent permitted by applicable Law, waive compliance with any of the agreements or conditions of the other parties contained herein; provided, however, that after the Company Stockholder Approval or the Parent Stockholder Approval has been obtained, no waiver may be made that pursuant to applicable Law requires further approval or adoption by the stockholders of the Company or Parent, as applicable, without such further approval or adoption. Any agreement on the part of a party to any such waiver shall be valid only if set forth in a written instrument executed and delivered by a duly authorized officer on behalf of such party. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the parties hereunder are cumulative and are not exclusive of any rights or remedies which they would otherwise have hereunder.

Section 10.4 Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, or if by e-mail, upon written confirmation of receipt by e-mail or otherwise, (b) on the first (1st) Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next- day courier or (c) on the earlier of confirmed receipt or the fifth (5th) Business Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(i) if to Parent, Merger Sub or the Surviving Company (following the Closing), to:

Graphite Bio, Inc.
611 Gateway Blvd.,
Suite 120 San Francisco, CA 94080
Attention: Kimberlee C. Drapkin
E-mail: [Omitted]

with a copy (which shall not constitute notice) to:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attention: Mitchell S. Bloom
Andrew H. Goodman
Tevia K. Pollard
Email: mbloom@goodinwlaw.com
agoodman@goodwinlaw.com
tpollard@goodwinlaw.com

(ii) if to Company, to:

Lenz Therapeutics, Inc.
445 Marine View Ave., Ste. #320
Del Mar, California 92014
Attention: Evert Schimmelpennink, Chief Executive Officer
Email: [Omitted]

with a copy (which shall not constitute notice) to:

Wilson Sonsini Goodrich & Rosati P.C.
One Market Plaza, Spear Tower
Suite 3300
San Francisco, CA 94015
Attention: Dan Koeppen
Ethan Lutske
E-mail: dkoeppen@wsgr.com
elutske@wsgr.com

Section 10.5 Entire Agreement. This Agreement (including the Exhibits hereto), the Company Disclosure Letter, the Parent Disclosure Letter, the Subscription Agreements, and the Confidentiality Agreement constitute the entire agreement, and supersede all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties with respect to the subject matter hereof and thereof.

Section 10.6 No Third Party Beneficiaries.

(a) Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement, except as provided in Section 7.5.

(b) The representations and warranties in this Agreement are the product of negotiations among the parties hereto and are for the sole benefit of the parties hereto. Any inaccuracies in such representations and warranties are subject to waiver by the parties hereto in accordance with Section 10.3 without notice or liability to any other Person. In some instances, the representations and warranties in this Agreement may represent an allocation among the parties hereto of risks associated with particular matters regardless of the knowledge of any of the parties hereto. Consequently, Persons other than the parties hereto may not rely upon the representations and warranties in this Agreement as characterizations of actual facts or circumstances as of the date of this Agreement or as of any other date.

Section 10.7 Governing Law. This Agreement and all disputes or controversies arising out of or relating to this Agreement or the transactions contemplated hereby shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to the laws of any other jurisdiction that might be applied because of the conflicts of laws principles of the State of Delaware.

Section 10.8 Submission to Jurisdiction. Each of the parties irrevocably agrees that any legal action or proceeding arising out of or relating to this Agreement brought by any party or its Affiliates against any other party or its Affiliates shall be brought and determined in the Court of Chancery of the State of Delaware; provided, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then any such legal action or proceeding may be brought in any federal court located in the State of Delaware or any other Delaware state court. Each of the parties hereby irrevocably submits to the jurisdiction of the aforesaid courts for itself and with respect to its property, generally and unconditionally, with regard to any such action or proceeding arising out of or relating to this Agreement and the transactions contemplated hereby. Each of the parties agrees not to commence any action, suit or proceeding relating thereto except in the courts described above in Delaware, other than actions in any court of competent jurisdiction to enforce any judgment, decree or award rendered by any such court in Delaware as described herein. Each of the parties further agrees that notice as provided herein shall constitute sufficient service of process and the parties further waive any argument that such service is insufficient. Each of the parties hereby irrevocably and unconditionally waives, and agrees not to assert, by way of motion or as a defense, counterclaim or otherwise, in any action or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby, (a) any claim that it is not personally subject to the

jurisdiction of the courts in Delaware as described herein for any reason, (b) that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in such courts (whether through service of notice, attachment prior to judgment, attachment in aid of execution of judgment, execution of judgment or otherwise) and (c) that (i) the suit, action or proceeding in any such court is brought in an inconvenient forum, (ii) the venue of such suit, action or proceeding is improper or (iii) this Agreement, or the subject matter hereof, may not be enforced in or by such courts.

Section 10.9 Assignment; Successors. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any party without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

Section 10.10 Specific Performance. The parties agree that irreparable damage would occur in the event that the parties hereto do not perform the provisions of this Agreement in accordance with its terms or otherwise breach such provisions. Accordingly, the parties acknowledge and agree that each party shall be entitled to an injunction, specific performance and other equitable relief to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in the Court of Chancery of the State of Delaware, provided, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then in any federal court located in the State of Delaware or any other Delaware state court, this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

Section 10.11 Severability. Whenever possible, each provision or portion of any provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable Law, but if any provision or portion of any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable Law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or portion of any provision in such jurisdiction, and this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision or portion of any provision had never been contained herein.

Section 10.12 Waiver of Jury Trial. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 10.13 Counterparts. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party.

Section 10.14 Facsimile or .pdf Signature. This Agreement may be executed by facsimile or .pdf signature and a facsimile or .pdf signature shall constitute an original for all purposes.

Section 10.15 No Presumption Against Drafting Party. Each of Parent, Merger Sub and the Company acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

[*The remainder of this page is intentionally left blank.*]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date first written above by their respective officers thereunto duly authorized.

GRAPHITE BIO, INC.

By: /s/ Kimberlee C. Drapkin
Name: Kimberlee C. Drapkin
Title: President and Chief Executive Officer

GENERATE MERGER SUB, INC.

By: /s/ Kimberlee C. Drapkin
Name: Kimberlee C. Drapkin
Title: President

LENZ THERAPEUTICS, INC.

By: /s/ Evert Schimmelpennink
Name: Evert Schimmelpennink
Title: President and Chief Executive Officer

[*Signature Page to Agreement and Plan of Merger*]

Annex B
OPINION OF LEERINK PARTNERS LLC

November 14, 2023

The Board of Directors
Graphite Bio, Inc.
201 Haskins Way, Suite 210
South San Francisco, CA 94080

Ladies and Gentlemen:

You have requested our opinion as to the fairness, from a financial point of view, to Graphite Bio, Inc., a Delaware corporation ("Parent"), of the Exchange Ratio (as defined below) proposed to be paid by Parent pursuant to the terms of the Agreement and Plan of Merger (the "Merger Agreement") to be entered into by and among Parent, Generate Merger Sub, Inc., a Delaware corporation and a direct wholly owned subsidiary of Parent ("Merger Sub"), and Lenz Therapeutics, Inc., a Delaware corporation (the "Company"). The Merger Agreement provides for the acquisition by Parent of the Company through the merger of Merger Sub with and into the Company (the "Merger"), with the Company continuing as the Surviving Company in the Merger and as a wholly owned subsidiary of Parent. Capitalized terms used but not defined herein have the meanings set forth in the Merger Agreement. At the effective time of the Merger (the "Effective Time"), after giving effect to the declaration of the Cash Dividend, by virtue of the Merger and without any further action on the part of Parent, Merger Sub, the Company or any stockholder of the Company or Parent, among other things, each share of Company Capital Stock issued and outstanding immediately prior to the Effective Time (other than any Excluded Shares and Dissenting Shares, but including any Company Restricted Shares) shall be converted into and become exchangeable for the right to receive, in exchange for (i) each share of Company Common Stock, a number of shares of Parent Common Stock equal to the Exchange Ratio and (ii) each share of Company Preferred Stock, a number of shares of Parent Common Stock equal to the Exchange Ratio multiplied by the aggregate number of shares of Company Common Stock into which each such share of Company Preferred Stock is then convertible (the "Merger Consideration"). As used herein, (i) the "Exchange Ratio" is the number of shares of Parent Common Stock to be received by holders of Company Capital Stock (other than Excluded Shares and Dissenting Shares) in the Merger, which is derived from the agreed relative valuations of the Company and Parent as set forth in the Merger Agreement; (ii) "Excluded Shares" means any shares of Company Capital Stock held in the treasury of the Company or owned, directly or indirectly, by Parent or Merger Sub immediately prior to the Effective Time (which shares shall automatically be cancelled and shall cease to exist, and no consideration shall be delivered in exchange therefor); and (iii) "Dissenting Shares" means any shares of Company Capital Stock (other than Excluded Shares) outstanding immediately prior to the Effective Time and held by a holder who is entitled to demand and has properly demanded appraisal for such shares of the Company Capital Stock in accordance with Section 262 of the General Corporation Law of the State of Delaware (the "DGCL") and, as of the Effective Time, have neither effectively withdrawn nor lost their rights to such appraisal and payment under the DGCL. The Exchange Ratio is subject to certain adjustments set forth in the Merger Agreement; we express no opinion as to any such adjustments. The Merger and the other transactions summarized above are collectively referred to herein as the "Transaction." The terms and conditions of the Transaction are more fully set forth in the Merger Agreement.

We have been engaged by Parent to act as its exclusive financial advisor in connection with the Transaction and we will receive a fee from Parent for providing such services, a portion of which is payable upon delivery of this opinion and the remaining (and principal) portion of which is contingent upon consummation of the Transaction. In addition, Parent has agreed to reimburse certain of our expenses arising, and indemnify us against certain liabilities that may arise, out of our engagement.

Leerink Partners LLC is a full-service securities firm engaged in securities trading and brokerage activities as well as investment banking and financial advisory services. As you are aware, we have in the past provided certain investment banking services to Parent and its affiliates unrelated to the Transaction, for which we have received compensation. In the ordinary course of business, we may, in the future, provide investment banking services to Parent, the Company or their respective affiliates and would expect to receive customary fees for the rendering of such services. In the ordinary course of our trading and brokerage activities, we have in the past and may in the future hold positions, for our own account or the accounts of our customers, in equity, debt or other securities of Parent, the Company or their respective affiliates.

Consistent with applicable legal and regulatory requirements, we have adopted policies and procedures to establish and maintain the independence of our research department and personnel. As a result, our research analysts may hold views, make statements or investment recommendations and/or publish research reports with respect to Parent, the Company and the Transaction and other participants in the Transaction that differ from the views of our investment banking personnel.

In connection with this opinion, we have reviewed, among other things: (i) the proposed execution version of the Merger Agreement, as provided to us by the Company on November 14, 2023; (ii) Parent's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed by Parent with the Securities and Exchange Commission (the "SEC"); (iii) Parent's Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, as filed by Parent with the SEC; (iv) certain Current Reports on Form 8-K, as filed by Parent with, or furnished by Parent to, the SEC; (v) certain internal information, primarily related to expense forecasts, relating to the business, operations, earnings, cash flow, assets, liabilities and prospects of Parent, as furnished to us by the management of Parent; and (vi) certain internal information relating to the business, operations, earnings, cash flow, assets, liabilities and prospects of the Company, including certain financial forecasts, analyses and projections relating to the Company prepared by management of Parent, as furnished to, and approved for use by, us for purposes of our analysis (the "Company Forecast") (collectively, the "Internal Data"). We have also conducted discussions with members of the senior management of Parent and the Company and their respective advisors and representatives regarding such Internal Data as well as the past and current business, operations, financial condition and prospects of each of Parent and the Company. We also conducted such other financial studies and analyses and took into account such other information as we deemed appropriate.

We have assumed, without independent verification or any responsibility therefor, the accuracy and completeness of the financial, legal, regulatory, tax, accounting and other information supplied to, discussed with, or reviewed by us for purposes of this opinion and have, with your consent, relied upon such information as being complete and accurate. In that regard, we have been advised by Parent, and have assumed, at your direction, that the Internal Data (including, without limitation, the Company Forecast) has been reasonably prepared on bases reflecting the best currently available estimates and judgments of the management of Parent and the Company as to the matters covered thereby and we have relied, at your direction, on the Internal Data for purposes of our analysis and this opinion. We express no view or opinion as to the Internal Data (including, without limitation, the Company Forecast) or the assumptions on which it is based. As you are aware, Parent's

management did not provide us with, and we did not otherwise have access to, financial forecasts regarding Parent's business, other than the expense forecasts described above. Accordingly, we did not perform a discounted cash flow analysis or any multiples-based analysis with respect to Parent. In addition, at your direction, we have not made any independent evaluation or appraisal of any of the assets or liabilities (contingent, derivative, off-balance-sheet or otherwise) of Parent or the Company, nor have we been furnished with any such evaluation or appraisal, and we have not been asked to conduct, and did not conduct, a physical inspection of the properties or assets of Parent or the Company.

We have assumed, at your direction, that the final executed Merger Agreement will not differ in any respect material to our analysis or this opinion from the last version reviewed by us. We have also assumed, at your direction, that the representations and warranties made by the Company and Parent and Merger Sub in the Merger Agreement are and will continue to be true and correct in all respects material to our analysis. Furthermore, we have assumed, at your direction, that the Transaction will be consummated on the terms set forth in the Merger Agreement and in accordance with all applicable laws and other relevant documents or requirements, without delay or the waiver, modification or amendment of any term, condition or agreement, the effect of which would be material to our analysis or this opinion and that, in the course of obtaining the necessary governmental, regulatory and other approvals, consents, releases and waivers for the Transaction, no delay, limitation, restriction, condition or other change will be imposed, the effect of which would be material to our analysis or this opinion. We have not evaluated and do not express any opinion as to the solvency or fair value of Parent or the Company, or their respective abilities to pay their obligations when they come due, or as to the impact of the Transaction on such matters, under any state, federal or other laws relating to bankruptcy, insolvency, or similar matters. We are not legal, regulatory, tax or accounting advisors, and we express no opinion as to any legal, regulatory, tax or accounting matters. We express no view or opinion as to the price or range of prices at which the shares of stock or other securities or instruments of Parent or any third party may trade at any time, including subsequent to the announcement or consummation of the Transaction.

We express no view as to, and our opinion does not address, Parent's underlying business decision to proceed with or effect the Transaction, or the relative merits of the Transaction as compared to any alternative business strategies or transactions that might be available to Parent or in which Parent might engage. This opinion is limited to and addresses only the fairness, from a financial point of view, as of the date hereof, to Parent of the Exchange Ratio proposed to be paid by Parent pursuant to the terms of the Merger Agreement. We have not been asked to, nor do we express any view on, and our opinion does not address, any other term or aspect of the Merger Agreement or the Transaction, including, without limitation, the structure or form of the Transaction, or any other agreements or arrangements contemplated by the Merger Agreement or entered into in connection with or otherwise contemplated by the Transaction, including, without limitation, the fairness of the Transaction or any other term or aspect of the Transaction to, or any consideration to be received in connection therewith by, or the impact of the Transaction on, the holders of any class of securities, creditors or other constituencies of Parent, the Company or any other party. In addition, we express no view or opinion as to the fairness (financial or otherwise) of the amount, nature or any other aspect of any compensation to be paid or payable to any of the officers, directors or employees of Parent, the Company or any other party, or class of such persons in connection with the Transaction, whether relative to the Exchange Ratio proposed to be paid by Parent pursuant to the terms of the Merger Agreement or otherwise. Our opinion is necessarily based on financial, economic, monetary, currency, market and other conditions and circumstances as in effect on, and the information made available to us as of, the date hereof, and we do not have any obligation or responsibility to update, revise or reaffirm this opinion based on circumstances, developments or events occurring after the date hereof. Our opinion does not constitute a recommendation to any stockholder of Parent or the Company as to whether or how such stockholder should vote with respect to the Merger or otherwise act with respect to the Transaction or any other matter.

Our financial advisory services and the opinion expressed herein are provided for the information and assistance of the Board of Directors of Parent (in their capacity as directors and not in any other capacity) in connection with and for purposes of its consideration of the Transaction. This opinion has been authorized by the Leerink Partners LLC Fairness Opinion Review Committee.

Based upon and subject to the foregoing, including the various assumptions, qualifications and limitations set forth herein, it is our opinion that, as of the date hereof, the Exchange Ratio proposed to be paid by Parent pursuant to the terms of the Merger Agreement is fair, from a financial point of view, to Parent.

Very truly yours,

/s/ LEERINK PARTNERS LLC

Annex C

LENZ THERAPEUTICS, INC.

SUPPORT AGREEMENT

THIS SUPPORT AGREEMENT (this "Agreement"), dated as of November 14, 2023 is made by and among Graphite Bio, Inc., a Delaware corporation ("Parent"), Lenz Therapeutics, Inc., a Delaware corporation (the "Company"), and the undersigned holders (each a "Stockholder") of shares of capital stock (the "Shares") of the Company.

WHEREAS, Parent, Generate Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent ("Merger Sub"), and the Company, have entered into an Agreement and Plan of Merger, dated of even date herewith (the "Merger Agreement"), providing for the merger of Merger Sub with and into the Company (the "Merger") with the Company surviving as a wholly-owned subsidiary of Parent;

WHEREAS, as of the date hereof, each Stockholder beneficially owns and has sole or shared voting power with respect to the number of Shares, and holds Company Options to acquire the number of Shares, indicated opposite such Stockholder's name on Schedule 1 attached hereto;

WHEREAS, as an inducement and a condition to the willingness of Parent to enter into the Merger Agreement, each Stockholder has agreed to enter into and perform this Agreement; and

WHEREAS, all capitalized terms used in this Agreement without definition herein shall have the meanings ascribed to them in the Merger Agreement.

NOW, THEREFORE, in consideration of, and as a condition to, Parent's entering into the Merger Agreement, each Stockholder, Parent and the Company agree as follows:

1. Agreement to Vote Shares. Each Stockholder agrees that, prior to the Expiration Date (as defined in Section 2 below), such Stockholder shall:

(a) whether at a meeting or by written consent, vote (or cause to be voted) all of the Shares and any New Shares that Stockholder shall be entitled to so vote (the "Covered Shares"), in favor of (A) adopting and approving the Merger Agreement and the transactions contemplated thereby, (B) any matter that could reasonably be expected to facilitate the Merger, the Concurrent PIPE Investment and the transactions contemplated in the Merger Agreement, and (C) against any Acquisition Proposals, or any agreement, transaction or other matter that is intended to, or would reasonably be expected to impeded, interfere with, delay, postpone or materially and adversely affect the consummation of the Merger, the Concurrent PIPE Investment and the transactions contemplated in the Merger Agreement;

(b) in furtherance of subsection (a), promptly following the declaration of effectiveness of the Registration Statement, but in any case within two (2) Business Days thereafter, take any action reasonably necessary upon the request of the Company to cause the Covered Shares held by such Stockholder to be voted in favor of the adoption and approval of the Merger Agreement and the transactions contemplated thereby, including, without limitation, the execution the stockholder written consent in substantially the form attached hereto as Exhibit A (with any such modifications as may be reasonably requested by the officers of the Company); and

(c) at any meeting of the stockholders of the Company or any adjournment or postponement thereof, appear at such meeting (in person or by proxy) or otherwise cause the Covered Shares to be counted as present thereat for purposes of calculating a quorum and at any such meeting, vote (or cause to be voted) all Covered Shares to approve any proposal to adjourn or postpone the meeting to a later date, if there are not sufficient votes for the adoption of the Merger Agreement on the date on which such meeting is held.

Stockholder shall not take or commit or agree to take any action inconsistent with the foregoing.

2. Expiration Date. As used in this Agreement, the term "Expiration Date" shall mean the earlier to occur of (a) the Effective Time, (b) such date and time as the Merger Agreement shall be terminated pursuant to Article IX thereof or otherwise or (c) the mutual written agreement of the parties to terminate this Agreement.

3. Additional Acquisitions. Each Stockholder agrees that any shares of capital stock or other equity voting securities of the Company that such Stockholder acquires or with respect to which such Stockholder otherwise acquires sole or shared voting power (including any proxy) after the execution of this Agreement and prior to the Expiration Date, whether by the exercise of any Company Options or otherwise, including, without limitation, by gift, succession, in the event of a stock split or as a dividend or distribution of any Shares ("New Shares"), shall be subject to the terms and conditions of this Agreement to the same extent as if they constituted the Shares.

4. Agreement to Retain Shares. From and after the date hereof until the Expiration Date, each Stockholder shall not, directly or indirectly, except for this Agreement and as contemplated by or related to the Company's Amended and Restated Voting Agreement, dated March 6, 2023 (the "Voting Agreement"), the Company's Amended and Restated Rights of First Refusal and Co-Sale Agreement, dated March 6, 2023 (the "ROFR"), and the Amended and Restated Investors' Right Agreement, dated March 6, 2023 (together with the Voting Agreement and the ROFR, the "Shareholder Agreements"), (a) sell, assign (directly or indirectly), transfer, tender, pledge, exchange, gift, grant, or placement in trust or otherwise dispose of (including, without limitation, by the creation of any Liens (as defined in Section 5(c) below)), or offer to do any of the foregoing (each, a "Transfer") any right, title, or interest (including any right or power to vote to which the holder thereof may be entitled, whether such right or power is granted by proxy or otherwise) to any Covered Shares, (b) deposit any Covered Shares into a voting trust or enter into a voting agreement or similar arrangement with respect to such Covered Shares or grant any proxy or power of attorney with respect thereto (other than this Agreement), (c) enter into any Contract, option, commitment or other arrangement or understanding with respect to the direct or indirect Transfer any right, title, or interest (including any right or power to vote to which the holder thereof may be entitled, whether such right or power is granted by proxy or otherwise) to any Covered Shares, or (d) take any action that would reasonably be expected to make any representation or warranty of such Stockholder contained herein untrue or incorrect or have the effect of restricting the Stockholder's legal power, authority and right to vote all of the Covered Shares or would otherwise prevent or disable such Stockholder from performing any of such Stockholder's obligations under this Agreement. Any action taken in violation of the foregoing sentence shall be null and void *ab initio*. Notwithstanding the foregoing, each Stockholder may make (1) Transfers by will or by operation of Law or other Transfers for estate-planning purposes, (2) with respect to such Stockholder's Company Options (and any Shares underlying such Company Options) which expire on or prior to the Expiration Date, Transfers of Shares to the Company (or effecting a "net exercise" of a Company Option) as payment for the (i) exercise price of such Stockholder's Company Options and (ii) taxes applicable to the exercise of such Stockholder's Company Options, (3) with respect to such Stockholder's Company Restricted Stock Awards, (i) transfers for the net settlement of such Stockholder's Company Restricted Stock Awards settled in Shares (to pay tax withholding obligations) or (ii) transfers for receipt upon settlement of such Stockholder's Company Restricted Stock Awards, and the sale of a sufficient number of such Shares acquired upon settlement of such securities as would generate sales proceeds sufficient to pay the aggregate taxes payable by such Stockholder as a result of such settlement, (4) if Stockholder is an entity, partnership or limited liability company, a Transfer to one or more equityholders, partners or members of Stockholder or to an affiliated person, corporation, trust or other entity controlling or under common control with Stockholder, or if Stockholder is a trust, a transfer to a beneficiary, provided that in each such case the applicable transferee has signed this Agreement, (5) make Transfers that occur by operation of law pursuant to a qualified domestic relations order or in connection with a divorce settlement, and (6) Transfers as the Company may otherwise agree in writing in its sole discretion. If any voluntary or involuntary Transfer of any Shares covered hereby shall occur (including a Transfer permitted by Section 4(1) through Section 4(5), sale by a Stockholder's trustee in bankruptcy, or a sale to a purchaser at any creditor's or court sale), the transferee (which term, as used herein, shall include any and all transferees and subsequent transferees of the initial transferee) shall take and hold such Shares subject to all of the restrictions, liabilities and rights under this

Agreement, which shall continue in full force and effect, and as a condition of receipt if such Transfer or sale, the transferee shall sign a written acknowledgement of such applicability or a joinder hereto.

5. Representations and Warranties of Stockholder. Each Stockholder hereby, severally but not jointly, represents and warrants to Parent and the Company as follows:

(a) If such Stockholder is an entity: (i) such Stockholder is duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, organized or constituted, (ii) such Stockholder has all necessary power and authority to execute and deliver this Agreement, to perform such Stockholder's obligations hereunder and to consummate the transactions contemplated hereby, and (iii) the execution and delivery of this Agreement, performance of such Stockholder's obligations hereunder and the consummation of the transactions contemplated hereby by such Stockholder have been duly authorized by all necessary action on the part of such Stockholder and no other proceedings on the part of such Stockholder are necessary to authorize this Agreement, or to consummate the transactions contemplated hereby. If such Stockholder is an individual, such Stockholder has the legal capacity to execute and deliver this Agreement, to perform such Stockholder's obligations hereunder and to consummate the transactions contemplated hereby;

(b) this Agreement has been duly executed and delivered by or on behalf of such Stockholder and, assuming this Agreement constitutes a valid and binding agreement of the Company and Parent, constitutes a valid and binding agreement with respect to such Stockholder, enforceable against such Stockholder in accordance with its terms, except as enforcement may be limited by general principles of equity whether applied in a court of Law or a court of equity and by bankruptcy, insolvency and similar Laws affecting creditors' rights and remedies generally;

(c) such Stockholder beneficially owns the number of Shares indicated opposite such Stockholder's name on Schedule 1, and will own any New Shares, free and clear of any liens, claims, charges or other encumbrances or restrictions of any kind whatsoever ("Liens"), other than any Liens that may exist pursuant to the Shareholder Agreements or applicable securities laws, and has sole or shared, and otherwise unrestricted, voting power with respect to such Covered Shares and, other than the Shareholder Agreements, none of the Covered Shares is subject to any voting trust or other agreement, arrangement or restriction with respect to the voting of the Covered Shares, except as contemplated by this Agreement and the stockholder agreements and arrangements referenced in the Merger Agreement and except for customary arrangements with the Stockholder's prime broker and/or custodian;

(d) the execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of his, her or its obligations hereunder and the compliance by such Stockholder with any provisions hereof will not, violate or conflict with, result in a material breach of or constitute a default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of any Liens on any Covered Shares pursuant to, any agreement, instrument, note, bond, mortgage, Contract, lease, license, permit or other obligation or any order, arbitration award, judgment or decree to which such Stockholder is a party or by which such Stockholder is bound, or any Law, statute, rule or regulation to which such Stockholder is subject or, in the event that such Stockholder is a corporation, partnership, trust or other entity, any bylaw or other organizational document of such Stockholder; except for any of the foregoing as would not reasonably be expected to prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect;

(e) the execution and delivery of this Agreement by such Stockholder does not, and the performance of this Agreement by such Stockholder does not and will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity or regulatory authority by such Stockholder except for applicable requirements, if any, of the Exchange Act, and except where the failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications, would not prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect;

(f) no investment banker, broker, finder or other intermediary is entitled to a fee or commission from Parent or the Company in respect of this Agreement based upon any Contract made by or on behalf of such Stockholder; and

(g) as of the date of this Agreement, there is no Action pending or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect.

6. Irrevocable Proxy. By execution of this Agreement, each Stockholder does hereby appoint the Company and any of its designees with full power of substitution and resubstitution, as such Stockholder's true and lawful attorney and irrevocable proxy, to the fullest extent of such Stockholder's rights with respect to the Covered Shares, to vote and exercise all voting and related rights, if such Stockholder fails to vote his, her or its Covered Shares, or otherwise fails to perform or comply with such Stockholder's obligations under this Agreement, solely with respect to the matters set forth in Section 1 hereof. Each Stockholder intends this proxy to be irrevocable and coupled with an interest hereunder until the Expiration Date, hereby revokes (or agrees to cause to be revoked) any proxy previously granted by such Stockholder with respect to the Covered Shares and represents that none of such previously-granted proxies are irrevocable, other than as contemplated by the Shareholder Agreements. The Stockholder hereby affirms that the proxy set forth in this Section 6 is given in connection with, and granted in consideration of, and as an inducement to the Company, Parent and Merger Sub to enter into the Merger Agreement and that such proxy is given to secure the obligations of the Stockholder under Section 1. The irrevocable proxy and power of attorney granted herein shall survive the death or incapacity of such Stockholder and the obligations of such Stockholder shall be binding on such Stockholder's heirs, personal representatives, successors, transferees and assigns. Each Stockholder hereby agrees not to grant any subsequent powers of attorney or proxies with respect to any Shares with respect to the matters set forth in Section 1 until after the Expiration Date. Notwithstanding anything contained herein to the contrary, this irrevocable proxy and power of attorney shall automatically terminate upon the Expiration Date. For the avoidance of doubt, this Agreement does not, and is not an agreement to, revoke or otherwise terminate any proxy granted by the Stockholder pursuant to the Voting Agreement.

7. Waiver of Appraisal and Dissenters' Rights. Each Stockholder hereby waives, and agrees not to assert or seek to perfect, any rights of appraisal or rights to dissent from the Merger that such Stockholder may have by virtue of ownership of the Covered Shares.

8. No Legal Actions. Each Stockholder will not in its capacity as a stockholder of the Company bring, commence, institute, maintain, prosecute or voluntarily aid any Action which (i) challenges the validity or seeks to enjoin the operation of any provision of this Agreement or (ii) alleges that the execution and delivery of this Agreement by such Stockholder, either alone or together with the other voting agreements and proxies to be delivered in connection with the execution of the Merger Agreement constitutes a breach of any fiduciary duty of the Company Board or any member thereof.

9. Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with, and not exclusive of, any other remedy conferred hereby, or by Law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof without the need of posting bond in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at Law or in equity.

10. Directors and Officers. This Agreement shall apply to each Stockholder solely in such Stockholder's capacity as a stockholder of the Company and/or holder of Company Options and not in such Stockholder's

capacity as a director, officer or employee of the Company or in such Stockholder's capacity as a trustee or fiduciary of any employee benefit plan or trust. Notwithstanding any provision of this Agreement to the contrary, nothing in this Agreement shall (or require Stockholder to attempt to) limit or restrict a director and/or officer of the Company in the exercise of his or her fiduciary duties consistent with the terms of the Merger Agreement as a director and/or officer of the Company or in his or her capacity as a trustee or fiduciary of any employee benefit plan or trust or prevent or be construed to create any obligation on the part of any director and/or officer of the Company or any trustee or fiduciary of any employee benefit plan or trust from taking any action in his or her capacity as such director, officer, trustee and/or fiduciary.

11. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in Parent any direct or indirect ownership or incidence of ownership of or with respect to any Covered Shares. All rights, ownership and economic benefits of and relating to the Covered Shares shall remain vested in and belong to such Stockholder, and Parent does not have authority to manage, direct, superintend, restrict, regulate, govern, or administer any of the policies or operations of the Company or exercise any power or authority to direct such Stockholder in the voting of any of the Covered Shares, except as otherwise provided herein.

12. Termination. This Agreement shall terminate and shall have no further force or effect as of the Expiration Date. Notwithstanding the foregoing, upon termination or expiration of this Agreement, no party shall have any further obligations or liabilities under this Agreement; *provided*, however, nothing set forth in this Section 12 or elsewhere in this Agreement shall relieve any party from liability for any fraud or for any willful and material breach of this Agreement prior to termination hereof.

13. Further Assurances. Each Stockholder shall, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as the Company or Parent may reasonably request for the purpose of effectively carrying out the transactions contemplated by this Agreement and the transactions contemplated by the Merger Agreement.

14. Disclosure. Each Stockholder hereby agrees that Parent and the Company may publish and disclose in the Proxy Statement, any prospectus filed with any regulatory authority in connection with the transactions contemplated by the Merger Agreement and any related documents filed with such regulatory authority and as otherwise required by Law, such Stockholder's identity and ownership of the Covered Shares and the nature of such Stockholder's commitments, arrangements and understandings under this Agreement and may further file this Agreement as an exhibit to the Proxy Statement or prospectus or in any other filing made by Parent or the Company as required by Law or the terms of the Merger Agreement, including with the SEC or other regulatory authority, relating to the transactions contemplated by the Merger Agreement, all subject to prior review and a reasonable opportunity to comment by Stockholder's counsel. Prior to the Closing, each Stockholder shall not, and shall use its reasonable best efforts to cause its representatives not to, directly or indirectly, make any press release, public announcement or other public communication without the prior written consent of Parent and the Company, *provided* that the foregoing shall not limit or affect any actions taken by such Stockholder (or any affiliated officer or director of such Stockholder) that would be permitted to be taken by such Stockholder, Parent or the Company pursuant to the Merger Agreement; *provided*, *further*, that the foregoing shall not affect any actions of Stockholder the prohibition of which would be prohibited under applicable Law and shall not prohibit Stockholder or its affiliates from making any publicly-available filings required by applicable law, regulation or legal process.

15. Notice. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or sent by overnight courier (providing proof of delivery), by facsimile transmission (providing confirmation of transmission) or by electronic transmission (upon confirmation of receipt of transmission) to the Company or Parent, as the case may be, in accordance with Section 10.5 of the Merger Agreement and to each Stockholder at his, her or its address or email address (upon confirmation of receipt of transmission) set forth on Schedule 1 attached hereto (or at such other address for a party as shall be specified by like notice).

16. Severability. Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions of this Agreement or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If a final judgment of a court of competent jurisdiction declares that any term or provision of this Agreement is invalid or unenforceable, the parties hereto agree that the court making such determination shall have the power to limit such term or provision, to delete specific words or phrases or to replace such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be valid and enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term or provision.

17. Assignability. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the parties hereto and their respective successors and assigns; *provided, however*, that neither this Agreement nor any of a party's rights or obligations hereunder may be assigned or delegated by such party without the prior written consent of the other parties hereto, and any attempted assignment or delegation of this Agreement or any of such rights or obligations by such party without the other party's prior written consent shall be void and of no effect. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the parties hereto) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

18. No Waivers. No waivers of any breach of this Agreement extended by the Company or Parent to such Stockholder shall be construed as a waiver of any rights or remedies of the Company or Parent, as applicable, with respect to any other stockholder of the Company who has executed an agreement substantially in the form of this Agreement with respect to the Covered Shares held or subsequently held by such stockholder or with respect to any subsequent breach of Stockholder or any other such stockholder of the Company. No waiver of any provisions hereof by any party shall be deemed a waiver of any other provisions hereof by any such party, nor shall any such waiver be deemed a continuing waiver of any provision hereof by such party.

19. Applicable Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the Laws of the state of Delaware, regardless of the Laws that might otherwise govern under applicable principles of conflicts of Laws. In any Action between any of the parties arising out of or relating to this Agreement, each of the parties: (i) irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the Court of Chancery of the state of Delaware or to the extent such court does not have subject matter jurisdiction, the Superior Court of the State of Delaware or the United States District Court for the District of Delaware, (ii) agrees that all claims in respect of such Action shall be heard and determined exclusively in accordance with clause (i) of this Section 19, (iii) waives any objection to laying venue in any such Action in such courts, (iv) waives any objection that such courts are an inconvenient forum or do not have jurisdiction over any party, and (v) agrees that service of process upon such party in any such Action shall be effective if notice is given in accordance with Section 15 of this Agreement.

20. Waiver of Jury Trial. The parties hereto hereby waive any right to trial by jury with respect to any Action related to or arising out of this Agreement, any document executed in connection herewith and the matters contemplated hereby and thereby.

21. No Agreement Until Executed. Irrespective of negotiations among the parties or the exchanging of drafts of this Agreement, this Agreement shall not constitute or be deemed to evidence a Contract, agreement, arrangement or understanding between the parties hereto unless and until (a) the Company Board has approved, for purposes of any applicable anti-takeover Laws and regulations and any applicable provision of the certificate of incorporation of the Company, this Agreement, the Merger Agreement and the transactions contemplated in the Merger Agreement, (b) the Merger Agreement is executed by all parties thereto, and (c) this Agreement is executed by all parties hereto.

22. Entire Agreement; Counterparts; Exchanges by Facsimile. This Agreement and the other agreements referred to in this Agreement constitute the entire agreement and supersede all prior agreements and understandings, both written and oral, among or between any of the parties with respect to the subject matter hereof and thereof. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed Agreement (in counterparts or otherwise) by all parties by facsimile or electronic transmission via ".pdf" shall be sufficient to bind the parties to the terms and conditions of this Agreement.

23. Amendment. This Agreement may not be amended, supplemented or modified, and no provisions hereof may be modified or waived, except by an instrument in writing signed on behalf of each party hereto; *provided*, *however*, that the rights or obligations of any Stockholder may be waived, amended or otherwise modified in a writing signed by Parent, the Company and such Stockholder.

24. Fees and Expenses. Except as otherwise specifically provided herein, the Merger Agreement or any other agreement contemplated by the Merger Agreement to which a party hereto is a party, each party hereto shall bear its own expenses in connection with this Agreement and the transactions contemplated hereby.

25. Voluntary Execution of Agreement. This Agreement is executed voluntarily and without any duress or undue influence on the part or behalf of the parties. Each of the parties hereby acknowledges, represents and warrants that (i) it has read and fully understood this Agreement and the implications and consequences thereof; (ii) it has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of its own choice, or it has made a voluntary and informed decision to decline to seek such counsel; and (iii) it is fully aware of the legal and binding effect of this Agreement.

26. Definition of Merger Agreement. For purposes of this Agreement, the term "Merger Agreement" may include such agreement as amended or modified as long as such amendments or modifications (a) do not (i) change the form of consideration payable under the Merger Agreement or (ii) change the Exchange Ratio, in the case of (i) and (ii), in a manner materially adverse to such Stockholder, or (b) have been agreed to in writing by such Stockholder.

27. Construction.

(a) For purposes of this Agreement, whenever the context requires: the singular number shall include the plural, and vice versa; the masculine gender shall include the feminine and neuter genders; the feminine gender shall include the masculine and neuter genders; and the neuter gender shall include masculine and feminine genders.

(b) The parties hereto agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in the construction or interpretation of this Agreement.

(c) As used in this Agreement, the words "include" and "including," and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation."

(d) Except as otherwise indicated, all references in this Agreement to "Sections," and "Schedules" are intended to refer to Sections of this Agreement and Schedules to this Agreement, respectively.

(e) The underlined headings contained in this Agreement are for convenience of reference only, shall not be deemed to be a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

[*Remainder of Page has Intentionally Been Left Blank*]

EXECUTED as of the date first above written.

[STOCKHOLDER]

Signature: _____

EXECUTED as of the date first above written.

GRAPHITE BIO, INC.

By: _____
Name:
Title:

LENZ THERAPEUTICS, INC.

By: _____
Name:
Title:

Signature Page to Company Support Agreement

SCHEDULE 1

Name, Address and Email Address of Stockholder	Shares of Company Common Stock	Shares of Company Preferred Stock	Company Options

Annex D

GRAPHITE BIO, INC.

SUPPORT AGREEMENT

THIS SUPPORT AGREEMENT (this "Agreement"), dated as of November 14, 2023 is made by and among Graphite Bio, Inc., a Delaware corporation ("Parent"), Lenz Therapeutics, Inc., a Delaware corporation (the "Company"), and the undersigned holders (each a "Stockholder") of shares of capital stock (the "Shares") of Parent.

WHEREAS, Parent, Generate Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent ("Merger Sub"), and the Company, have entered into an Agreement and Plan of Merger, dated of even date herewith (the "Merger Agreement"), providing for the merger of Merger Sub with and into the Company (the "Merger") with the Company surviving as a wholly-owned subsidiary of Parent;

WHEREAS, as of the date hereof, each Stockholder beneficially owns and has sole or shared voting power with respect to the number of Shares, and holds Parent Options to acquire the number of Shares, indicated opposite such Stockholder's name on Schedule 1 attached hereto;

WHEREAS, as an inducement and a condition to the willingness of the Company to enter into the Merger Agreement, each Stockholder has agreed to enter into and perform this Agreement; and

WHEREAS, all capitalized terms used in this Agreement without definition herein shall have the meanings ascribed to them in the Merger Agreement.

NOW, THEREFORE, in consideration of, and as a condition to, the Company's entering into the Merger Agreement, each Stockholder, Parent and the Company agree as follows:

1. Agreement to Vote Shares. Each Stockholder agrees that, prior to the Expiration Date (as defined in Section 2 below), at any meeting of the stockholders of Parent or any adjournment or postponement thereof, such Stockholder shall:

(a) appear at such meeting (in person or by proxy) or otherwise cause the Shares and any New Shares (as defined in Section 3 below) to be counted as present thereat for purposes of calculating a quorum;

(b) from and after the date hereof until the Expiration Date, vote (or cause to be voted) all of the Shares and any New Shares that Stockholder shall be entitled to so vote (the "Covered Shares"): (i) in favor of (A) all of the Parent Stockholder Proposals, (B) any matter that could reasonably be expected to facilitate the Merger, the Concurrent PIPE Investment and the transactions contemplated in the Merger Agreement, and (C) against any Acquisition Proposals, or any agreement, transaction or other matter that is intended to, or would reasonably be expected to impeded, interfere with, delay, postpone or materially and adversely affect the consummation of the Merger, the Concurrent PIPE Investment and the transactions contemplated in the Merger Agreement; and (ii) to approve any proposal to adjourn or postpone the meeting to a later date, if there are not sufficient votes for the adoption of the Merger Agreement on the date on which such meeting is held. Stockholder shall not take or commit or agree to take any action inconsistent with the foregoing.

2. Expiration Date. As used in this Agreement, the term "Expiration Date" shall mean the earlier to occur of (a) the Effective Time, (b) such date and time as the Merger Agreement shall be terminated pursuant to Article IX thereof or otherwise or (c) the mutual written agreement of the parties to terminate this Agreement.

3. Additional Acquisitions. Each Stockholder agrees that any shares of capital stock or other equity voting securities of Parent that such Stockholder acquires or with respect to which such Stockholder otherwise acquires sole or shared voting power (including any proxy) after the execution of this Agreement and prior to the Expiration Date, whether by the exercise of any Parent Options or otherwise, including, without limitation, by

gift, succession, in the event of a stock split or as a dividend or distribution of any Shares ("New Shares"), shall be subject to the terms and conditions of this Agreement to the same extent as if they constituted the Shares.

4. Agreement to Retain Shares. From and after the date hereof until the Expiration Date, each Stockholder shall not, directly or indirectly, (a) sell, assign (directly or indirectly), transfer, tender, pledge, exchange, gift, grant, or placement in trust or otherwise dispose of (including, without limitation, by the creation of any Liens (as defined in Section 5(c) below)), or offer to do any of the foregoing (each, a "Transfer") any right, title, or interest (including any right or power to vote to which the holder thereof may be entitled, whether such right or power is granted by proxy or otherwise) to any Covered Shares, (b) deposit any Covered Shares into a voting trust or enter into a voting agreement or similar arrangement with respect to such Covered Shares or grant any proxy or power of attorney with respect thereto (other than this Agreement), (c) enter into any Contract, option, commitment or other arrangement or understanding with respect to the direct or indirect Transfer any right, title, or interest (including any right or power to vote to which the holder thereof may be entitled, whether such right or power is granted by proxy or otherwise) to any Covered Shares, or (d) take any action that would reasonably be expected to make any representation or warranty of such Stockholder contained herein untrue or incorrect or have the effect of restricting the Stockholder's legal power, authority and right to vote all of the Covered Shares or would otherwise prevent or disable such Stockholder from performing any of such Stockholder's obligations under this Agreement. Any action taken in violation of the foregoing sentence shall be null and void *ab initio*. Notwithstanding the foregoing, each Stockholder may make (1) Transfers by will or by operation of Law or other Transfers for estate-planning purposes, (2) with respect to such Stockholder's Parent Options (and any Shares underlying such Parent Options) which expire on or prior to the Expiration Date, Transfers of Shares to Parent (or effecting a "net exercise" of a Parent Option) as payment for the (i) exercise price of such Stockholder's Parent Options and (ii) taxes applicable to the exercise of such Stockholder's Parent Options, (3) with respect to such Stockholder's Parent Restricted Stock Awards, (i) transfers for the net settlement of such Stockholder's Parent Restricted Stock Awards settled in Shares (to pay tax withholding obligations) or (ii) transfers for receipt upon settlement of such Stockholder's Parent Restricted Stock Awards, and the sale of a sufficient number of such Shares acquired upon settlement of such securities as would generate sales proceeds sufficient to pay the aggregate taxes payable by such Stockholder as a result of such settlement, (4) if Stockholder is an entity, partnership or limited liability company, a Transfer to one or more equityholders, partners or members of Stockholder or to an affiliated person, corporation, trust or other entity controlling or under common control with Stockholder, or if Stockholder is a trust, a transfer to a beneficiary, provided that in each such case the applicable transferee has signed this Agreement, (5) make Transfers that occur by operation of law pursuant to a qualified domestic relations order or in connection with a divorce settlement, and (6) Transfers as the Company may otherwise agree in writing in its sole discretion. If any voluntary or involuntary Transfer of any Shares covered hereby shall occur (including a Transfer permitted by Section 4(1) through Section 4(5), sale by a Stockholder's trustee in bankruptcy, or a sale to a purchaser at any creditor's or court sale), the transferee (which term, as used herein, shall include any and all transferees and subsequent transferees of the initial transferee) shall take and hold such Shares subject to all of the restrictions, liabilities and rights under this Agreement, which shall continue in full force and effect, and as a condition of receipt if such Transfer or sale, the transferee shall sign a written acknowledgement of such applicability or a joinder hereto.

5. Representations and Warranties of Stockholder. Each Stockholder hereby, severally but not jointly, represents and warrants to Parent and the Company as follows:

(a) If such Stockholder is an entity: (i) such Stockholder is duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, organized or constituted, (ii) such Stockholder has all necessary power and authority to execute and deliver this Agreement, to perform such Stockholder's obligations hereunder and to consummate the transactions contemplated hereby, and (iii) the execution and delivery of this Agreement, performance of such Stockholder's obligations hereunder and the consummation of the transactions contemplated hereby by such Stockholder have been duly authorized by all necessary action on the part of such Stockholder and no other proceedings on the part of such Stockholder are necessary to authorize this Agreement, or to consummate the transactions contemplated

hereby. If such Stockholder is an individual, such Stockholder has the legal capacity to execute and deliver this Agreement, to perform such Stockholder's obligations hereunder and to consummate the transactions contemplated hereby;

(b) this Agreement has been duly executed and delivered by or on behalf of such Stockholder and, assuming this Agreement constitutes a valid and binding agreement of the Company and Parent, constitutes a valid and binding agreement with respect to such Stockholder, enforceable against such Stockholder in accordance with its terms, except as enforcement may be limited by general principles of equity whether applied in a court of Law or a court of equity and by bankruptcy, insolvency and similar Laws affecting creditors' rights and remedies generally;

(c) such Stockholder beneficially owns the number of Shares indicated opposite such Stockholder's name on Schedule 1, and will own any New Shares, free and clear of any liens, claims, charges or other encumbrances or restrictions of any kind whatsoever ("Liens"), and has sole or shared, and otherwise unrestricted, voting power with respect to such Covered Shares and none of the Covered Shares is subject to any voting trust or other agreement, arrangement or restriction with respect to the voting of the Covered Shares, except as contemplated by this Agreement and the stockholder agreements and arrangements referenced in the Merger Agreement and except for customary arrangements with the Stockholder's prime broker and/or custodian;

(d) the execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of his, her or its obligations hereunder and the compliance by such Stockholder with any provisions hereof will not, violate or conflict with, result in a material breach of or constitute a default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of any Liens on any Covered Shares pursuant to, any agreement, instrument, note, bond, mortgage, Contract, lease, license, permit or other obligation or any order, arbitration award, judgment or decree to which such Stockholder is a party or by which such Stockholder is bound, or any Law, statute, rule or regulation to which such Stockholder is subject or, in the event that such Stockholder is a corporation, partnership, trust or other entity, any bylaw or other organizational document of such Stockholder; except for any of the foregoing as would not reasonably be expected to prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect;

(e) the execution and delivery of this Agreement by such Stockholder does not, and the performance of this Agreement by such Stockholder does not and will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity or regulatory authority by such Stockholder except for applicable requirements, if any, of the Exchange Act, and except where the failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications, would not prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect;

(f) no investment banker, broker, finder or other intermediary is entitled to a fee or commission from Parent or the Company in respect of this Agreement based upon any Contract made by or on behalf of such Stockholder; and

(g) as of the date of this Agreement, there is no Action pending or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to prevent or delay the performance by such Stockholder of his, her or its obligations under this Agreement in any material respect.

6. Irrevocable Proxy. By execution of this Agreement, each Stockholder does hereby appoint the Company and any of its designees with full power of substitution and resubstitution, as such Stockholder's true and lawful attorney and irrevocable proxy, to the fullest extent of such Stockholder's rights with respect to the Covered Shares, to vote and exercise all voting and related rights, if such Stockholder fails to vote his, her or its Covered Shares, or otherwise fails to perform or comply with such Stockholder's obligations under this Agreement, solely with respect to the matters set forth in Section 1 hereof. Each Stockholder intends this proxy to be irrevocable

and coupled with an interest hereunder until the Expiration Date, hereby revokes (or agrees to cause to be revoked) any proxy previously granted by such Stockholder with respect to the Covered Shares and represents that none of such previously-granted proxies are irrevocable. The Stockholder hereby affirms that the proxy set forth in this Section 6 is given in connection with, and granted in consideration of, and as an inducement to the Company, Parent and Merger Sub to enter into the Merger Agreement and that such proxy is given to secure the obligations of the Stockholder under Section 1. The irrevocable proxy and power of attorney granted herein shall survive the death or incapacity of such Stockholder and the obligations of such Stockholder shall be binding on such Stockholder's heirs, personal representatives, successors, transferees and assigns. Each Stockholder hereby agrees not to grant any subsequent powers of attorney or proxies with respect to any Shares with respect to the matters set forth in Section 1 until after the Expiration Date. Notwithstanding anything contained herein to the contrary, this irrevocable proxy and power of attorney shall automatically terminate upon the Expiration Date.

7. Parent Board Adverse Recommendation Change. In the event of a Parent Board Adverse Recommendation Change made in compliance with the terms of the Merger Agreement, then the aggregate number of Covered Shares hereunder shall be reduced (with such reduction applying to each Stockholder, subject to a similar voting agreement, on a pro rata basis in accordance with each Stockholder's relative Covered Shares and rounded up to the nearest whole Covered Share) without any action by Parent or the Stockholders such that the number of Covered Shares held, collectively, by all Stockholders, subject to a similar voting agreement, shall represent in the aggregate that number of shares (after such reduction) equal to the greater of (i) twenty percent (20%) of the outstanding shares of Parent Common Stock or (ii) thirty percent (30%) of the votes cast in support of the Parent Stockholder Proposals (assuming the Stockholder and each other Stockholder subject to a similar voting agreement vote all of their Covered Shares on the Parent Stockholder Proposals), as applicable.

8. No Legal Actions. Each Stockholder will not in its capacity as a stockholder of Parent bring, commence, institute, maintain, prosecute or voluntarily aid any Action which (i) challenges the validity or seeks to enjoin the operation of any provision of this Agreement or (ii) alleges that the execution and delivery of this Agreement by such Stockholder, either alone or together with the other voting agreements and proxies to be delivered in connection with the execution of the Merger Agreement constitutes a breach of any fiduciary duty of the Parent Board or any member thereof.

9. Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with, and not exclusive of, any other remedy conferred hereby, or by Law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof without the need of posting bond in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at Law or in equity.

10. Directors and Officers. This Agreement shall apply to each Stockholder solely in such Stockholder's capacity as a stockholder of Parent and/or holder of Parent Options and not in such Stockholder's capacity as a director, officer or employee of Parent or any of its Subsidiaries or in such Stockholder's capacity as a trustee or fiduciary of any employee benefit plan or trust. Notwithstanding any provision of this Agreement to the contrary, nothing in this Agreement shall (or require Stockholder to attempt to) limit or restrict a director and/or officer of Parent in the exercise of his or her fiduciary duties consistent with the terms of the Merger Agreement as a director and/or officer of Parent or in his or her capacity as a trustee or fiduciary of any employee benefit plan or trust or prevent or be construed to create any obligation on the part of any director and/or officer of Parent or any trustee or fiduciary of any employee benefit plan or trust from taking any action in his or her capacity as such director, officer, trustee and/or fiduciary.

11. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in the Company any direct or indirect ownership or incidence of ownership of or with respect to any Covered Shares. All rights, ownership and economic benefits of and relating to the Covered Shares shall remain vested in and belong to such Stockholder, and the Company does not have authority to manage, direct, superintend, restrict, regulate, govern, or administer any of the policies or operations of Parent or exercise any power or authority to direct such Stockholder in the voting of any of the Covered Shares, except as otherwise provided herein.

12. Termination. This Agreement shall terminate and shall have no further force or effect as of the Expiration Date. Notwithstanding the foregoing, upon termination or expiration of this Agreement, no party shall have any further obligations or liabilities under this Agreement; *provided*, *however*, nothing set forth in this Section 12 or elsewhere in this Agreement shall relieve any party from liability for any fraud or for any willful and material breach of this Agreement prior to termination hereof.

13. Further Assurances. Each Stockholder shall, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as the Company or Parent may reasonably request for the purpose of effectively carrying out the transactions contemplated by this Agreement and the transactions contemplated by the Merger Agreement.

14. Disclosure. Each Stockholder hereby agrees that Parent and the Company may publish and disclose in the Proxy Statement, any prospectus filed with any regulatory authority in connection with the transactions contemplated by the Merger Agreement and any related documents filed with such regulatory authority and as otherwise required by Law, such Stockholder's identity and ownership of the Covered Shares and the nature of such Stockholder's commitments, arrangements and understandings under this Agreement and may further file this Agreement as an exhibit to the Proxy Statement or prospectus or in any other filing made by Parent or the Company as required by Law or the terms of the Merger Agreement, including with the SEC or other regulatory authority, relating to the transactions contemplated by the Merger Agreement, all subject to prior review and a reasonable opportunity to comment by Stockholder's counsel. Prior to the Closing, each Stockholder shall not, and shall use its reasonable best efforts to cause its representatives not to, directly or indirectly, make any press release, public announcement or other public communication without the prior written consent of Parent and the Company, *provided* that the foregoing shall not limit or affect any actions taken by such Stockholder (or any affiliated officer or director of such Stockholder) that would be permitted to be taken by such Stockholder, Parent or the Company pursuant to the Merger Agreement; *provided*, *further*, that the foregoing shall not affect any actions of Stockholder the prohibition of which would be prohibited under applicable Law and shall not prohibit Stockholder or its affiliates from making any publicly-available filings required by applicable law, regulation or legal process.

15. Notice. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or sent by overnight courier (providing proof of delivery), by facsimile transmission (providing confirmation of transmission) or by electronic transmission (upon confirmation of receipt of transmission) to the Company or Parent, as the case may be, in accordance with Section 10.5 of the Merger Agreement and to each Stockholder at his, her or its address or email address (upon confirmation of receipt of transmission) set forth on Schedule 1 attached hereto (or at such other address for a party as shall be specified by like notice).

16. Severability. Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions of this Agreement or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If a final judgment of a court of competent jurisdiction declares that any term or provision of this Agreement is invalid or unenforceable, the parties hereto agree that the court making such determination shall have the power to limit such term or provision, to delete specific words or phrases or to replace such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be valid and enforceable as so

modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term or provision.

17. Assignability. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the parties hereto and their respective successors and assigns; *provided, however*, that neither this Agreement nor any of a party's rights or obligations hereunder may be assigned or delegated by such party without the prior written consent of the other parties hereto, and any attempted assignment or delegation of this Agreement or any of such rights or obligations by such party without the other party's prior written consent shall be void and of no effect. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the parties hereto) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

18. No Waivers. No waivers of any breach of this Agreement extended by the Company or Parent to such Stockholder shall be construed as a waiver of any rights or remedies of the Company or Parent, as applicable, with respect to any other stockholder of Parent who has executed an agreement substantially in the form of this Agreement with respect to the Covered Shares held or subsequently held by such stockholder or with respect to any subsequent breach of Stockholder or any other such stockholder of Parent. No waiver of any provisions hereof by any party shall be deemed a waiver of any other provisions hereof by any such party, nor shall any such waiver be deemed a continuing waiver of any provision hereof by such party.

19. Applicable Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the Laws of the state of Delaware, regardless of the Laws that might otherwise govern under applicable principles of conflicts of Laws. In any Action between any of the parties arising out of or relating to this Agreement, each of the parties: (i) irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the Court of Chancery of the state of Delaware or to the extent such court does not have subject matter jurisdiction, the Superior Court of the State of Delaware or the United States District Court for the District of Delaware, (ii) agrees that all claims in respect of such Action shall be heard and determined exclusively in accordance with clause (i) of this Section 19, (iii) waives any objection to laying venue in any such Action in such courts, (iv) waives any objection that such courts are an inconvenient forum or do not have jurisdiction over any party, and (v) agrees that service of process upon such party in any such Action shall be effective if notice is given in accordance with Section 15 of this Agreement.

20. Waiver of Jury Trial. The parties hereto hereby waive any right to trial by jury with respect to any Action related to or arising out of this Agreement, any document executed in connection herewith and the matters contemplated hereby and thereby.

21. No Agreement Until Executed. Irrespective of negotiations among the parties or the exchanging of drafts of this Agreement, this Agreement shall not constitute or be deemed to evidence a Contract, agreement, arrangement or understanding between the parties hereto unless and until (a) the Parent Board has approved, for purposes of any applicable anti-takeover Laws and regulations and any applicable provision of the certificate of incorporation of Parent, this Agreement, the Merger Agreement and the transactions contemplated in the Merger Agreement, (b) the Merger Agreement is executed by all parties thereto, and (c) this Agreement is executed by all parties hereto.

22. Entire Agreement; Counterparts; Exchanges by Facsimile. This Agreement and the other agreements referred to in this Agreement constitute the entire agreement and supersede all prior agreements and understandings, both written and oral, among or between any of the parties with respect to the subject matter hereof and thereof. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed

Agreement (in counterparts or otherwise) by all parties by facsimile or electronic transmission via ".pdf" shall be sufficient to bind the parties to the terms and conditions of this Agreement.

23. Amendment. This Agreement may not be amended, supplemented or modified, and no provisions hereof may be modified or waived, except by an instrument in writing signed on behalf of each party hereto; *provided*, *however*, that the rights or obligations of any Stockholder may be waived, amended or otherwise modified in a writing signed by Parent, the Company and such Stockholder.

24. Fees and Expenses. Except as otherwise specifically provided herein, the Merger Agreement or any other agreement contemplated by the Merger Agreement to which a party hereto is a party, each party hereto shall bear its own expenses in connection with this Agreement and the transactions contemplated hereby.

25. Voluntary Execution of Agreement. This Agreement is executed voluntarily and without any duress or undue influence on the part or behalf of the parties. Each of the parties hereby acknowledges, represents and warrants that (i) it has read and fully understood this Agreement and the implications and consequences thereof; (ii) it has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of its own choice, or it has made a voluntary and informed decision to decline to seek such counsel; and (iii) it is fully aware of the legal and binding effect of this Agreement.

26. Definition of Merger Agreement. For purposes of this Agreement, the term "Merger Agreement" may include such agreement as amended or modified as long as such amendments or modifications (a) do not (i) change the form of consideration payable under the Merger Agreement or (ii) change the Exchange Ratio, in the case of (i) and (ii), in a manner materially adverse to such Stockholder, or (b) have been agreed to in writing by such Stockholder.

27. Construction.

(a) For purposes of this Agreement, whenever the context requires: the singular number shall include the plural, and vice versa; the masculine gender shall include the feminine and neuter genders; the feminine gender shall include the masculine and neuter genders; and the neuter gender shall include masculine and feminine genders.

(b) The parties hereto agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in the construction or interpretation of this Agreement.

(c) As used in this Agreement, the words "include" and "including," and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation."

(d) Except as otherwise indicated, all references in this Agreement to "Sections," and "Schedules" are intended to refer to Sections of this Agreement and Schedules to this Agreement, respectively.

(e) The underlined headings contained in this Agreement are for convenience of reference only, shall not be deemed to be a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

[*Remainder of Page has Intentionally Been Left Blank*]

EXECUTED as of the date first above written.

[STOCKHOLDER]

Signature: _____

EXECUTED as of the date first above written.

GRAPHITE BIO, INC.

By: _____
Name:
Title:

LENZ THERAPEUTICS, INC.

By: _____
Name:
Title:

Signature Page to Parent Support Agreement

SCHEDULE 1

Name, Address and Email Address of Stockholder	Shares of Parent Common Stock	Parent Options	Parent Restricted Stock Awards

Annex E

LOCK-UP AGREEMENT

November 14, 2023

Graphite Bio, Inc.
611 Gateway Blvd., Suite 120
San Francisco, CA 94080

Ladies and Gentlemen:

The undersigned signatory of this lock-up agreement (this "***Lock-Up Agreement***") understands that Graphite Bio, Inc., a Delaware corporation ("***Parent***"), has entered into an Agreement and Plan of Merger, dated as of November 14, 2023 (as the same may be amended from time to time, the "***Merger Agreement***") with Generate Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent, and Lenz Therapeutics, Inc., a Delaware corporation (the "***Company***"). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement.

As a condition and inducement to each of the parties to enter into the Merger Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby irrevocably agrees that, subject to the exceptions set forth herein, the undersigned will not, during the period commencing upon the Closing and ending on the date that is 90 days after the Closing Date (the "***Restricted Period***"):

(i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Parent Common Stock or any securities convertible into or exercisable or exchangeable for Parent Common Stock (including without limitation, (a) Parent Common Stock or such other securities of Parent which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the SEC, (b) securities of Parent which may be issued upon exercise or vesting, as applicable, of a stock option or warrant or settlement of a restricted stock unit and (c) Parent Common Stock or such other securities to be issued to the undersigned in connection with the Merger, in each case, that are currently or hereafter owned of record or beneficially (including holding as a custodian)) by the undersigned (collectively, the "***Undersigned's Shares***");

(ii) enter into any swap, short sale, hedge or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Undersigned's Shares regardless of whether any such transaction described in clause (i) above or this clause (ii) is to be settled by delivery of Parent Common Stock or other securities, in cash or otherwise;

(iii) make any demand for, or exercise any right with respect to, the registration of any shares of Parent Common Stock or any security convertible into or exercisable or exchangeable for Parent Common Stock (other than such rights set forth in the Merger Agreement); or

(iv) publicly disclose the intention to do any of the foregoing described in clauses (i), (ii) and (iii) above.

The restrictions and obligations contemplated by this Lock-Up Agreement shall not apply to:

(a) transfers of the Undersigned's Shares:

(i) if the undersigned is a natural person, (A) to any person related to the undersigned by blood or adoption who is an immediate family member of the undersigned, or by marriage or domestic partnership (a "***Family Member***"), or to a trust formed for the benefit of the undersigned or any of

the undersigned's Family Members, (B) to the undersigned's estate, following the death of the undersigned, by will, intestacy or other operation of Law, (C) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement, (D) as a bona fide gift or a charitable contribution, as such term is described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, or (E) to any corporation, partnership or other entity, in each case, all of the beneficial ownership interests of which are held by the undersigned or a Family Member of the undersigned;

(ii) if the undersigned is a corporation, partnership or other entity, (A) to another corporation, partnership, or other entity that is a direct or indirect affiliate (as defined under Rule 12b-2 of the Exchange Act) of the undersigned, including investment funds or other entities under common control or management with the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), (B) as a distribution or dividend to equity holders, current or former partners, members, stockholders or managers (or to the estates of any of the foregoing), as applicable, of the undersigned (including upon the liquidation and dissolution of the undersigned pursuant to a plan of liquidation approved by the undersigned's equity holders), (C) as a bona fide gift or a charitable contribution, as such term is described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, (D) transfers or dispositions not involving a change in beneficial ownership or (E) with prior written consent of Parent (as constituted following the Closing); or

(iii) if the undersigned is a trust, to any grantors or beneficiaries of the trust;

provided that, in the case of any transfer or distribution pursuant to this clause (a), such transfer is not for value and each donee, heir, beneficiary or other transferee or distributee shall sign and deliver to Parent a lock-up agreement in the form of this Lock-Up Agreement with respect to the shares of Parent Common Stock or such other securities that have been so transferred or distributed and if a filing pursuant to Section 16(a) of the Exchange Act is required, such filing shall describe the nature of the transfer;

(b) the disposition (including a forfeiture or repurchase) to Parent of any shares of restricted stock granted pursuant to the terms of any employee benefit plan or restricted stock purchase agreement, *provided that* if a filing pursuant to Section 16(a) of the Exchange Act is required, such filing shall describe the nature of the transfer;

(c) the surrender or forfeiture of shares of Parent Common Stock or other securities of Parent to Parent, including to satisfy tax withholding obligations upon exercise or vesting or the exercise price upon a cashless net exercise, in each case, of stock options, restricted stock, other equity awards, warrants or other rights to acquire shares of Parent Common Stock pursuant to equity incentive plans of Parent or the Company or outstanding warrants issued by the Company or Parent; *provided that* if a filing pursuant to Section 16(a) of the Exchange Act is required, such filing shall describe the nature of the transfer;

(d) transfers, distributions, sales or other transactions of shares of Parent Common Stock purchased on the open market or in a public offering, in each case, following the Closing;

(e) transfers pursuant to a bona-fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Parent' capital stock involving a Change of Control (as defined below) of Parent that has been approved by the board of directors of Parent (as constituted following the Closing), provided that in the event that such tender offer, merger, consolidation or other such transaction is not completed, the Undersigned's Shares shall remain subject to the restrictions contained in this Lock-Up Agreement ("Change of Control" shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons, of shares of capital

stock if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of Parent (or the surviving entity));

(f) transfers pursuant to an order of a court or regulatory agency;

(g) transfers, distributions, sales or other transactions with the prior written consent of Parent (as constituted following the Closing); or

(h) transfers, distributions, sales or other transactions of shares of Parent, if any, purchased from the Parent pursuant to that certain Stock Purchase Agreement dated as of the date of the Merger Agreement in the Concurrent PIPE Investment.

In addition, nothing in this Lock-Up Agreement shall prohibit the undersigned from exercising options or warrants for shares of Parent Common Stock or the conversion of convertible securities of Parent held by the undersigned into shares of Parent Common Stock; provided that the shares of Parent Common Stock acquired upon such exercise and/or conversion shall be subject to the terms of this Lock-Up Agreement.

Notwithstanding anything to the contrary herein, the undersigned may establish a trading or distribution plan pursuant to Rule 10b5-1 under the Exchange Act; provided that (i) to the extent a public announcement or filing under the Exchange Act is required of or voluntarily made by or on behalf of the undersigned or Parent regarding the establishment of such disposition plan(s), such announcement or filing shall include a statement to the effect that no transfer of the Undersigned's Shares may be made under such disposition plan during the Restricted Period and (ii) no transfer pursuant to such plan is made during the Restricted Period.

In the event that a release or waiver is granted by Parent (as constituted following the Closing) to any officer, director or any other stockholder who is a party to a similar lock-up agreement entered into in connection with the transactions contemplated by the Merger (other than the undersigned) relating to the restrictions set forth above for the Undersigned's Shares (each, a "***Release***" and, collectively, "***Releases***"), the same percentage of the Undersigned's Shares shall be immediately, fully and irrevocably released or waived in the same manner and on the same terms from any remaining restrictions set forth above on a pro rata basis (the "***Pro-Rata Release***") and Parent will promptly (and in any event within two business days of such Release) notify the undersigned of the terms of such Pro-Rata Release.

Notwithstanding the foregoing, such Pro-Rata Release shall not be applied (i) to the extent that the aggregate holding percentage of the securities subject to any such Release or Releases is less than or equal to one percent (1%) in the aggregate of the Parent Common Stock outstanding immediately following the Closing (calculated on a fully-diluted basis), (ii) if the Release is effected solely to permit a transfer not involving a disposition for value and the transferee agrees in writing to be bound by the same terms described in this Lock-Up Agreement to the extent and for the duration of the Restricted Period, (iii) to the extent the Release is granted to a natural person and determined, in the sole discretion of Parent, to be due to circumstances of emergency or hardship of such natural person, or (iv) if the Release, in full or in part, of any securities from the restrictions of this Lock-Up Agreement is in connection with an underwritten follow-on offering during the Restricted Period (the "***Follow-On Offering***"); provided that, to the extent the undersigned holds registration rights with respect to the Undersigned's Shares, the undersigned has been given the opportunity to participate in such Follow- On Offering on a basis consistent with such contractual rights.

Any attempted transfer in violation of this Lock-Up Agreement will be of no effect and null and void, regardless of whether the purported transferee has any actual or constructive knowledge of the transfer restrictions set forth in this Lock-Up Agreement, and will not be recorded on the share register of Parent. In furtherance of the foregoing, the undersigned agrees that Parent and any duly appointed transfer agent for the registration or transfer of the securities described herein are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Agreement. Parent may cause

the legend set forth below, or a legend substantially equivalent thereto, to be placed upon any certificate(s) or other documents, ledgers or instruments evidencing the undersigned's ownership of Parent Common Stock:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AND MAY ONLY BE TRANSFERRED IN COMPLIANCE WITH A LOCK-UP AGREEMENT, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY.

If a stockholder and/or an officer and/or director of the Company or Parent enters into a Lock- Up Agreement with respect to securities of the Company or Parent with any terms that are more favorable, from the perspective of the undersigned, than the terms of this Lock-Up Agreement, then Parent shall provide equivalent rights to the undersigned.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that if the Merger Agreement is terminated for any reason, the undersigned shall be released from all obligations under this Lock-Up Agreement. The undersigned understands that Parent and the Company are proceeding with the transactions contemplated in the Merger Agreement in reliance upon this Lock-Up Agreement.

Any and all remedies herein expressly conferred upon Parent or the Company will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by Law or equity, and the exercise by Parent or the Company of any one remedy will not preclude the exercise of any other remedy. The undersigned agrees that irreparable damage would occur to Parent and/or the Company in the event that any provision of this Lock-Up Agreement was not performed in accordance with its specific terms or were otherwise breached. It is accordingly agreed that Parent and the Company shall be entitled to an injunction or injunctions to prevent breaches of this Lock-Up Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which Parent or the Company is entitled at Law or in equity, and the undersigned waives any bond, surety or other security that might be required of Parent or the Company with respect thereto.

Upon the release of any of the Undersigned's Shares from this Lock-Up Agreement, Parent will facilitate the timely preparation and delivery of certificates or the establishment of book-entry positions at Parent's transfer agent representing the Undersigned's Shares without the restrictive legend above or the withdrawal of any stop transfer instructions.

This Lock-Up Agreement and any claim, controversy or dispute arising under or related to this Lock-Up Agreement shall be governed by and construed in accordance with the Laws of the state of Delaware, without regard to the conflict of Laws principles thereof.

This Lock-Up Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed Lock-Up Agreement (in counterparts or otherwise) by Parent, the Company and the undersigned by electronic transmission in .pdf format shall be sufficient to bind such parties to the terms and conditions of this Lock-Up Agreement.

(Signature Page Follows)

Very truly yours,

Print Name of Stockholder:

[_____]

Signature (for individuals):

_____

Signature (for entities):

By: _____
Name: _____
Title: _____

Accepted and Agreed
By **Graphite Bio, Inc.**:

By: _____
Name: _____
Title: _____

Accepted and Agreed
by **Lenz Therapeutics, Inc.**:

By: _____
Name: _____
Title: _____

[Signature Page to Lock-Up Agreement]

Annex F

CERTIFICATE OF AMENDMENT OF

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF

GRAPHITE BIO, INC.

Graphite Bio, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies that:

1. The name of the Corporation is Graphite Bio, Inc.

2. The amendments set forth in this Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Corporation (this "Certificate of Amendment") have been duly adopted in accordance with Section 242 of the Delaware General Corporation Law by the board of directors of the Corporation and by the stockholders of the Corporation. This Certificate of Amendment hereby amends the Corporation's Amended and Restated Certificate of Incorporation, as currently in effect (the "Certificate of Incorporation") as set forth below.

3. Article I of the Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

"The name of the Corporation is LENZ Therapeutics, Inc."

4. Article IV of the Certificate of Incorporation is hereby amended to add the following new Section C immediately following the existing Section B thereof:

"C. REVERSE STOCK SPLIT

Effective immediately upon the filing and effectiveness of this Certificate of Amendment with the Secretary of State of the State of Delaware (the "Effective Time"), a one-for-[●][1] reverse stock split of the shares of Common Stock, pursuant to which every [●][1] shares of the Common Stock issued and held of record by each stockholder of the Corporation (including treasury shares) immediately prior to the Effective Time shall be reclassified and combined into one validly issued, fully paid and non-assessable share of Common Stock from and after the Effective Time (such reclassification and combination of shares, the "Reverse Stock Split"). The par value of the Common Stock following the Reverse Stock Split shall remain at $0.00001 per share. No fractional shares of Common Stock shall be issued as a result of the Reverse Stock Split. In lieu of any fractional shares to which a stockholder would otherwise be entitled (after taking into account all fractional shares of Common Stock otherwise issuable to such holder), the Company shall, upon surrender of such holder's certificate(s) representing such fractional shares of Common Stock (if any), pay cash in an amount equal to such fractional shares of Common Stock multiplied by the then fair value of the Common Stock as determined by the Board of Directors of the Corporation.

Each stock certificate or book entry share that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented

[1] Shall be a whole number between and including [6] and [12]. By approving the Reverse Stock Split, the stockholders of the Corporation are approving the Certificate of Amendment with each possible conversion number within such range, and authorizing the Board of Directors to file any such Certificate of Amendment as the Board of Directors deems advisable and in the best interest of the Corporation and its stockholder prior to the merger (and in accordance with the terms of the merger agreement), with any such Certificate of Amendment not filed prior to the closing date under the merger agreement being abandoned and of no further force and effect.

by such certificate or book entry share have been combined (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time); provided, however, that each stockholder of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been combined."

IN WITNESS WHEREOF, this Certificate of Amendment has been signed by an authorized officer of the Corporation on .

GRAPHITE BIO, INC.

By: _____
[NAME]
[TITLE]

Annex G
2024 EQUITY INCENTIVE PLAN

LENZ THERAPEUTICS, INC.

2024 EQUITY INCENTIVE PLAN

1. Purposes of the Plan; Award Types.

(a) Purposes of the Plan. The purposes of this Plan are to attract and retain personnel for positions with the Company Group, to provide additional incentive to Employees, Directors, and Consultants (collectively, "Service Providers"), and to promote the success of the Company's business.

(b) Award Types. The Plan permits the grant of Incentive Stock Options to any ISO Employee and the grant of Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, and Performance Awards to any Service Provider.

2. Definitions. The following definitions are used in this Plan:

(a) "Administrator" means Administrator as defined in Section 4(a).

(b) "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards, including but not limited to the related issuance of Shares under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and, only to the extent applicable with respect to an Award or Awards, the tax, securities, exchange control, and other laws of any jurisdictions other than the United States where Awards are, or will be, granted under the Plan. Reference to a section of an Applicable Law or regulation related to that section shall include such section or regulation, any valid regulation issued under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, or Performance Awards.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms applicable to an Award granted under the Plan. The Award Agreement is subject to the terms of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, that for this subsection, the acquisition of additional stock by any one Person, who prior to such acquisition is considered to own more than 50% of the total voting power of the stock of the Company will not be considered a Change in Control and provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of 50% or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this

Section 2(f)(i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Company which occurs on the date a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the appointment or election; or

(iii) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, that for this Section 2(f)(iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets:

(1) a transfer to an entity controlled by the Company's stockholders immediately after the transfer, or

(2) a transfer of assets by the Company to:

(A) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock,

(B) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company,

(C) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company, or

(D) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in Section 2(f)(iii)(2)(A) to Section 2(f)(iii)(2)(C).

For this definition, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. For this definition, persons will be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company. For the avoidance of doubt, wholly-owned subsidiaries of the Company shall not be considered "Persons" for purposes of this Section 2(f).

(iv) A transaction will not be a Change in Control:

(1) unless the transaction qualifies as a change in control event within the meaning of Code Section 409A; or

(2) if its primary purpose is to (1) change the jurisdiction of the Company's incorporation, or (2) create a holding company owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a section of the Code or regulation related to that section shall include such section or regulation, any valid regulation issued or other official applicable guidance of general or direct applicability promulgated under suchsection or regulation, and any comparable provision of any future legislation, regulation or official guidance of general or direct applicability amending, supplementing or superseding such section or regulation.

(h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board.

(i) "Common Stock" means the common stock of the Company.

(j) "Company" means LENZ Therapeutics, Inc., a Delaware corporation (previously named Graphite Bio, Inc.), or any of its successors.

(k) "Company Group" means the Company, any Parent or Subsidiary, and any entity that, from time to time and at the time of any determination, directly or indirectly, is in control of, is controlled by or is under common control with the Company.

(l) "Consultant" means any natural person engaged by a member of the Company Group to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capital raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities. A Consultant must be a person to whom the issuance of Shares registered on Form S-8 under the Securities Act is permitted.

(m) "Director" means a member of the Board.

(n) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non- discriminatory standards adopted by the Administrator from time to time.

(o) "Effective Date" means the date of the consummation of the merger by and between the Company, Lenz Therapeutics, Inc., and certain other parties, pursuant to that certain Agreement and Plan of Merger dated November 14, 2023 (such merger, the "Merger").

(p) "Employee" means any person, including Officers and Directors, providing services as an employee to the Company or any member of the Company Group. However, with respect to Incentive Stock Options, an Employee must be employed by the Company or any Parent or Subsidiary of the Company (such an Employee, an "ISO Employee"). Notwithstanding, Options awarded to individuals not providing services to the Company or a Subsidiary of the Company should be carefully structured to comply with the payment timing rule of Code Section 409A. Neither service as a Director nor payment of a director's fee by the Company will constitute "employment" by the Company.

(q) "Exchange Act" means the U.S. Securities Exchange Act of 1934.

(r) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower Exercise Prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the Exercise Price of an outstanding Award is increased or reduced. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(s) "Exercise Price" means the price payable per share to exercise an Award.

(t) "Expiration Date" means the last possible day on which an Option or Stock Appreciation Right may be exercised. Any exercise must be completed before midnight U.S. Pacific Time between the Expiration Date and the following date; provided, however, that any broker-assisted cashless exercise of an Option granted hereunder must be completed by the close of market trading on the Expiration Date.

(u) "Fair Market Value" means, as of any date, the value of a Share, determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the New York Stock Exchange, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market of The NASDAQ Stock Market, the Fair Market Value will be the closing sales price for a Share (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported by such source as the Administrator determines to be reliable. If the determination date for the Fair Market Value occurs on a non-Trading Day (i.e., a weekend or holiday), the Fair Market Value will be such price on the immediately preceding Trading Day, unless otherwise determined by the Administrator;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date on the last Trading Day such bids and asks were reported), as reported by such source as the Administrator determines to be reliable; or

(iii) Absent an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

Notwithstanding the foregoing, if the determination date for the Fair Market Value occurs on a weekend, holiday or other day other than a Trading Day, the Fair Market Value will be the price as determined under subsections (t)(i) or (t)(ii) above on the immediately preceding Trading Day, unless otherwise determined by the Administrator. In addition, for purposes of determining the fair market value of shares for any reason other than the determination of the Exercise Price of Options or Stock Appreciation Rights, fair market value will be determined by the Administrator in a manner compliant with Applicable Laws and applied consistently for such purpose. Note that the determination of fair market value for purposes of tax withholding may be made in the Administrator's sole discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.

(v) "Fiscal Year" means a fiscal year of the Company.

(w) "Grant Date" means Grant Date as defined in Section 4(c).

(x) "Incentive Stock Option" means an Option that is intended to qualify and does qualify as an incentive stock option within the meaning of Code Section 422.

(y) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(z) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(aa) "Option" means a right to acquire Shares granted under Section 6.

(bb) "Outside Director" means a Director who is not an Employee.

(cc) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(dd) "Participant" means the holder of an outstanding Award.

(ee) "Performance Awards" means an Award which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be cash- or stock-denominated and may be settled for cash, Shares or other securities or a combination of the foregoing under Section 10.

(ff) "Performance Period" means Performance Period as defined in Section 10(a)

(gg) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock is subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(hh) "Plan" means this 2024 Equity Incentive Plan.

(ii) "Prior Plans" means the Company's 2020 Equity Incentive Plan, the Graphite Bio, Inc. 2020 Stock Option and Grant Plan, and the Graphite Bio, Inc. 2021 Stock Option and Grant Plan, each as amended from time to time.

(jj) "Restricted Stock" means Shares issued under an Award granted under Section 8 or issued as a result of the early exercise of an Option.

(kk) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value, granted under Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(ll) "Securities Act" means U.S. Securities Act of 1933.

(mm) "Service Provider" means an Employee, Director or Consultant.

(nn) "Share" means a share of the Common Stock as adjusted in accordance with Section 13 of the Plan.

(oo) "Stock Appreciation Right" means an Award granted under Section 7.

(pp) "Subsidiary" means a "subsidiary corporation" as defined in Code Section 424(f), in relation to the Company.

(qq) "Tax Withholdings" means tax, social insurance and social security liability or premium obligations in connection with the Awards, including, without limitation, (i) all federal, state, and local income, employment and any other taxes (including the Participant's U.S. Federal Insurance Contributions Act (FICA) obligation) that are required to be withheld by the Company or a member of the Company Group, (ii) the Participant's and, to the extent required by the Company, the fringe benefit tax liability of the Company or a member of the Company Group, if any, associated with the grant, vesting, or exercise of an Award or sale of Shares issued under the Award, and (iii) any other taxes or social insurance or social security liabilities or premium the responsibility for which the Participant has, or has agreed to bear, with respect to such Award, the Shares subject to, or other amounts or property payable under, an Award, or otherwise associated with or related to participation in the Plan and with respect to which the Company or the applicable member of the Company Group has either agreed to withhold or has an obligation to withhold.

(rr) "Ten Percent Owner" means Ten Percent Owner as defined in Section 6(b)(i).

(ss) "Trading Day" means a day on which the primary stock exchange or national market system (or other trading platform, as applicable) on which the Common Stock trades is open for trading.

(tt) "Transaction" means Transaction as defined in Section 14(a).

3. Shares Subject to the Plan.

(a) Allocation of Shares to Plan. The maximum aggregate number of Shares that may be issued under the Plan is:

(i) 21,083,640 Shares, plus

(ii) any Shares subject to awards granted under the Prior Plans (including, but not limited to, awards granted under the Company's 2020 Equity Incentive Plan that were assumed in the Merger), that, on or after the Effective Date, expire or otherwise terminate without having been exercised in full, are tendered to or withheld by the Company for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of Shares to be added to the Plan under this clause (ii) equal to 11,255,510 Shares, plus

(iii) any additional Shares that become available for issuance under the Plan under Sections 3(b) and 3(c).

The Shares may be authorized but unissued Common Stock or Common Stock issued and then reacquired by the Company.

(b) Automatic Share Reserve Increase. The number of Shares available for issuance under the Plan will be increased on the first day of each Fiscal Year beginning with the 2025 Fiscal Year, in an amount equal to the least of:

(i) 31,625,460 Shares,

(ii) 5% of the total number of shares of all classes of common stock of the Company outstanding on the last day of the immediately preceding Fiscal Year, and

(iii) a lesser number of Shares determined by the Administrator.

(c) Share Reserve Return.

(i) Options and Stock Appreciation Rights. If an Option or Stock Appreciation Right expires or becomes unexercisable without having been exercised in full or is surrendered under an Exchange Program, the unissued Shares subject to the Option or Stock Appreciation Right will become available for future issuance under the Plan.

(ii) Stock Appreciation Rights. Only Shares actually issued pursuant to a Stock Appreciation Right (i.e., the net Shares issued) will cease to be available under the Plan; all remaining Shares originally subject to the Stock Appreciation Right will remain available for future issuance under the Plan.

(iii) Full-Value Awards. Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, or stock-settled Performance Awards that are reacquired by the Company due to failure to vest or are forfeited to the Company will become available for future issuance under the Plan.

(iv) Withheld Shares. Shares used to pay the Exercise Price of an Award or to satisfy Tax Withholdings related to an Award will become available for future issuance under the Plan.

(v) Cash-Settled Awards. If any portion of an Award under the Plan is paid to a Participant in cash rather than Shares, that cash payment will not reduce the number of Shares available for issuance under the Plan.

(d) Incentive Stock Options. The maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal 300% of the aggregate Share number stated in Section 3(a) plus, to the extent allowable under Code Section 422, any Shares that become available for issuance under the Plan under Sections 3(b) and 3(c).

(e) Adjustment. The numbers provided in Sections 3(a), 3(b), and 3(d) will be adjusted as a result of changes in capitalization and any other adjustments under Section 13.

(f) Substitute Awards. If the Committee grants Awards in substitution for equity compensation awards outstanding under a plan maintained by an entity acquired by or becomes a part of any member of the Company Group, the grant of those substitute Awards will not decrease the number of Shares available for issuance under the Plan.

(g) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) The Plan will be administered by the Board or a Committee (the "Administrator"). Different Administrators may administer the Plan with respect to different groups of Service Providers. The Board may retain the authority to concurrently administer the Plan with a Committee and may revoke the delegation of some or all authority previously delegated.

(ii) To the extent permitted by Applicable Laws, the Board or a Committee may delegate to one or more subcommittees of the Board or a Committee or officers the authority to grant Awards to Employees of the Company or any of its Subsidiaries, provided that the delegation must comply with any limitations on the authority required by Applicable Laws, including the total number of Shares that may be subject to the Awards granted by such officer(s). This delegation may be revoked at any time by the Board or Committee.

(b) Powers of the Administrator. Subject to the terms of the Plan, any limitations on delegations specified by the Board, and any requirements imposed by Applicable Laws, the Administrator will have the authority, in its sole discretion, to make any determinations and perform any actions deemed necessary or advisable to administer the Plan including:

(i) to determine the Fair Market Value;

(ii) to approve forms of Award Agreements for use under the Plan;

(iii) to select the Service Providers to whom Awards may be granted and grant Awards to such Service Providers;

(iv) to determine the number of Shares to be covered by each Award granted;

(v) to determine the terms and conditions, consistent with the Plan, of any Award granted. Such terms and conditions may include, but are not limited to, the Exercise Price, the time(s) when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating to an Award;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe interpret the Plan and make any decisions necessary to administer the Plan, including but not limited to determining whether and when a Change in Control has occurred;

(viii) to establish, amend and rescind rules and regulations and adopt sub-plans relating to the Plan, including rules, regulations and sub-plans for the purposes of facilitating compliance with applicable non-U.S. laws, easing the administration of the Plan and/or obtaining tax-favorable treatment for Awards granted to Service Providers located outside the U.S., in each case as the Administrator may deem necessary or advisable;

(ix) to interpret, modify or amend each Award (subject to Section 19), including extending the Expiration Date and the post-termination exercisability period of such modified or amended Awards;

(x) to allow Participants to satisfy tax withholding obligations in any manner permitted by Section 16;

(xi) to delegate ministerial duties to any of the Company's employees;

(xii) to authorize any person to take any steps and execute, on behalf of the Company, any documents required for an Award previously granted by the Administrator to be effective;

(xiii) to temporarily suspend the exercisability of an Award if the Administrator deems such suspension to be necessary or appropriate for administrative purposes, provided that, unless prohibited by Applicable Laws, such suspension shall be lifted in all cases not less than 10 Trading Days before the last date that the Award may be exercised;

(xiv) to allow Participants to defer the receipt of the payment of cash or the delivery of Shares otherwise due to any such Participants under an Award; and

(xv) to make any determinations necessary or appropriate under Section 13

(c) Grant Date. The grant date of an Award ("Grant Date") will be the date that the Administrator makes the determination granting such Award or may be a later date if such later date is designated by the Administrator on the date of the determination or under an automatic grant policy. Notice of the determination will be provided to each Participant within a reasonable time after the Grant Date.

(d) Waiver. The Administrator may waive any terms, conditions or restrictions.

(e) Fractional Shares. Except as otherwise provided by the Administrator, any fractional Shares that result from the adjustment of Awards will be canceled. Any fractional Shares that result from vesting percentages will be accumulated and vested on the date that an accumulated full Share is vested.

(f) Electronic Delivery. The Company may deliver by e-mail or other electronic means (including posting on a website maintained by the Company or by a third party under contract with the Company or another member of the Company Group) all documents relating to the Plan or any Award and all other documents that the Company is required to deliver to its security holders (including prospectuses, annual reports and proxy statements).

(g) Choice of Law; Choice of Forum. The Plan, all Awards and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under this Plan, a Participant's acceptance of an Award is his or her consent to the jurisdiction of the State of Delaware, and agreement that any such litigation will be conducted in Delaware Court of Chancery, or the federal courts for the United States for the District of Delaware, and no other courts, regardless of where a Participant's services are performed.

(h) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units and Performance Awards may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Stock Option Award Agreement. Each Option will be evidenced by an Award Agreement that will specify the number of Shares subject to the Option, per share Exercise Price, its Expiration Date, and such other terms and conditions as the Administrator determines. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. An Option not designated as an Incentive Stock Option is a Nonstatutory Stock Option.

(b) Exercise Price. The Exercise Price for the Shares to be issued upon exercise of an Option will be determined by the Administrator and stated in the Award Agreement, subject to the following:

(i) In the case of an Incentive Stock Option:

(1) granted to an ISO Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary (a "Ten Percent Owner"), the Exercise Price for the Shares to be issued will be no less than 110% of the Fair Market Value per Share on the date of grant; and

(2) granted to any ISO Employee other than a Ten Percent Owner, the Exercise Price for the Shares to be issued will be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option, the Exercise Price for the Shares to be issued will be no less than 100% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with an Exercise Price of less than 100% of the Fair Market Value per Share on the date of grant (i) pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code or (ii) to a Service Provider that is not a U.S. taxpayer.

(c) Form of Consideration. The Administrator will determine the acceptable form(s) of consideration for exercising an Option. Unless the Administrator determines otherwise, the consideration may consist of any one or more or combination of the following, to the extent permitted by Applicable Laws:

(i) cash;

(ii) check or wire transfer;

(iii) promissory note, if and to the extent approved by the Company;

(iv) other Shares that have a fair market value on the date of surrender equal to the aggregate Exercise Price of the Shares as to which such Option will be exercised. To the extent not prohibited by the Administrator, this shall include the ability to tender Shares to exercise the Option and then use the Shares received on exercise to exercise the Option with respect to additional Shares;

(v) consideration received by the Company under a cashless exercise arrangement (whether through a broker or otherwise) implemented by the Company for the exercise of Options that has been approved by the Administrator, if and to the extent permitted by the Company with respect to a particular Award;

(vi) consideration received by the Company under a net exercise program under which Shares are withheld from otherwise deliverable Shares that has been approved by the Administrator, if and to the extent permitted by the Company with respect to a particular Award; and

(vii) any other consideration or method of payment to issue Shares (provided that other forms of considerations may only be approved by the Administrator).

The Administrator has the power to remove or limit any of the above forms of consideration for exercising an Option, except for the payment of cash, at any time in its sole discretion.

(d) Term of Option. The term of each Option will be determined by the Administrator and stated in the Award Agreement, provided that, in the case of an Incentive Stock Option: (a) granted to a Ten Percent Owner, the Option may not be exercisable after the expiration of 5 years from the date such Option is granted, or such shorter term as may be provided in the Award Agreement; and (b) granted to an ISO Employee other than a Ten Percent Owner, the Option may not be exercisable after the expiration of 10 years from the date such Option is granted term, or such shorter term as may be provided in the Award Agreement.

(e) Incentive Stock Option Limitations.

(i) To the extent that the aggregate fair market value of the shares with respect to which incentive stock options under Code Section 422(b) are exercisable for the first time by a Participant during any calendar year (under all plans and agreements of the Company Group) exceeds $100,000, the incentive stock options whose value exceeds $100,000 will be treated as nonstatutory stock options. Incentive stock options will be considered in the order in which they were granted. For this purpose, the fair market value of the shares subject to an option will be determined as of the grant date of each option.

(ii) If an Option is designated in the Administrator action that granted it as an Incentive Stock Option but the terms of the Option do not comply with Sections 6(b) and 6(d), then the Option will not qualify as an Incentive Stock Option.

(f) Exercise of Option. An Option is exercised when the Company receives: (i) a notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable Tax Withholdings). Shares issued upon exercise of an Option will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, despite the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. An Option may not be exercised for a fraction of a Share. Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan (except as provided in Section 3(c)) and for purchase under the Option, by the number of Shares as to which the Option is exercised.

(i) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon such cessation as the result of the Participant's death or Disability, the Participant may exercise his or her Option within 30 days of such cessation, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent that the Option is vested on the date of cessation. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if on the date of such cessation the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If after such cessation the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(ii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within 6 months of cessation, or such

longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent the Option is vested on the date of cessation. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if on the date of cessation the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If after such cessation the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within 6 months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent that the Option is vested on the date of death, by the Participant's designated beneficiary, provided the Administrator has permitted the designation of a beneficiary and provided such beneficiary has been designated prior to the Participant's death in a form (if any) acceptable to the Administrator. If the Administrator has not permitted the designation of the beneficiary or if no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. If the Option is exercised pursuant to this Section 6(f)(iii), Participant's designated beneficiary or personal representative shall be subject to the terms of this Plan and the Award Agreement, including but not limited to the restrictions on transferability and forfeitability applicable to the Service Provider. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(g) Expiration of Options. Subject to Section 6(d), an Option's Expiration Date will be set forth in the Award Agreement. An Option may expire before its expiration date under the Plan (including pursuant to Sections 6(f), 13, 14, or 17(d)) or under the Award Agreement.

(h) Tolling of Expiration. If exercising an Option prior to its expiration is not permitted because of Applicable Laws, other than the rules of any stock exchange or quotation system on which the Common Stock is listed or quoted, the Option will remain exercisable until 30 days after the first date on which exercise no longer would be prevented by such provisions; provided, however, that this tolling of expiration shall not apply if and to the extent the holder of such Option is a United States taxpayer and the tolling would result in a violation of Section 409A such that the Option would be subject to additional taxation or interest under Section 409A. If this would result in the Option remaining exercisable past its Expiration Date, then unless earlier terminated pursuant to Section 14, the Option will remain exercisable only until the end of the later of (x) the first day on which its exercise would not be prevented by Section 20(a) and (y) its Expiration Date.

7. Stock Appreciation Rights.

(a) Stock Appreciation Right Award Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the number of Shares subject to the Stock Appreciation Right, its per share Exercise Price, its Expiration Date, and such other terms and conditions as the Administrator determines.

(b) Exercise Price. The Exercise Price of a Stock Appreciation Right will be determined by the Administrator, provided that in the case of a Stock Appreciation Right granted to a U.S. taxpayer, the Exercise Price will be no less than 100% of the Fair Market Value of a Share on the date of grant.

(c) Payment of Stock Appreciation Right Amount. Payment upon Stock Appreciation Right exercise may be made in cash, in Shares (which, on the date of exercise, have an aggregate fair market value equal to the amount of payment to be made under the Award), or any combination of cash and Shares, with the determination of form of payment made by the Administrator. When a Participant exercises a Stock Appreciation Right, he or she will be entitled to receive a payment from the Company equal to:

(i) the excess, if any, between the fair market value on the date of exercise over the Exercise Price multiplied by

(ii) the number of Shares with respect to which the Stock Appreciation Right is exercised.

(d) Exercise of Stock Appreciation Right. A Stock Appreciation Right is exercised when the Company receives a notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Stock Appreciation Right. Shares issued upon exercise of a Stock Appreciation Right will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to a Stock Appreciation Right, despite the exercise of the Stock Appreciation Right. The Company will issue (or cause to be issued) such Shares promptly after the Stock Appreciation Right is exercised. A Stock Appreciation Right may not be exercised for a fraction of a Share. Exercising a Stock Appreciation Right in any manner will decrease (x) the number of Shares thereafter available under the Stock Appreciation Right by the number of Shares as to which the Stock Appreciation Right is exercised and (y) the number of Shares thereafter available under the Plan by the number of Shares issued upon such exercise.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right's Expiration Date will be set forth in the Award Agreement. A Stock Appreciation Right may expire before its expiration date under the Plan (including pursuant to Sections 13, 14, or 17(c)) or under the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Tolling of Expiration. If exercising a Stock Appreciation Right prior to its expiration is not permitted because of Applicable Laws, other than the rules of any stock exchange or quotation system on which the Common Stock is listed or quoted, the Stock Appreciation Right will remain exercisable until 30 days after the first date on which exercise no longer would be prevented by such provisions; provided, however, that this tolling of expiration shall not apply if and to the extent the holder of such Stock Appreciation Right is a United States taxpayer and the tolling would result in a violation of Section 409A such that the Stock Appreciation Right would be subject to additional taxation or interest under Section 409A. If this would result in the Stock Appreciation Right remaining exercisable past its Expiration Date, then unless earlier terminated pursuant to Section 14, the Stock Appreciation Right will remain exercisable only until the end of the later of (x) the first day on which its exercise would not be prevented by Section 20(a) and (y) its Expiration Date.

8. Restricted Stock.

(a) Restricted Stock Award Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the number of Shares subject to the Award of Restricted Stock and such other terms and conditions as the Administrator determines. For the avoidance of doubt, Restricted Stock may be granted without any Period of Restriction (e.g., fully vested stock bonuses). Unless the Administrator determines otherwise, Shares of Restricted Stock will be held in escrow while unvested.

(b) Restrictions.

(i) Except as provided in this Section 8(b) or the Award Agreement, while unvested, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated.

(ii) While unvested, Service Providers holding Shares of Restricted Stock may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(iii) Service Providers holding a Share covered by an Award of Restricted Stock will not be entitled to receive dividends and other distributions paid with respect to such Shares while such Shares are unvested, unless the Administrator provides otherwise. If the Administrator provides that dividends and distributions will be received and any such dividends or distributions are paid in cash they will be subject to the same provisions regarding forfeitability as the Shares with respect to which they were paid and if such dividend or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares with respect to which they were paid and, unless the Administrator determines otherwise, the Company will hold such dividends until the restrictions on the Shares with respect to which they were paid have lapsed.

(iv) Except as otherwise provided in this Section 8(b) or an Award Agreement, a Share covered by each Award of Restricted Stock made under the Plan will be released from escrow when practicable after the last day of the applicable Period of Restriction.

(v) The Administrator may impose (prior to grant) or remove (at any time) any restrictions on Shares covered by an Award of Restricted Stock.

9. Restricted Stock Units.

(a) Restricted Stock Unit Award Agreement. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the number of Restricted Stock Units subject to the Award of Restricted Stock Units and such other terms and conditions as the Administrator determines.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria, if any, that, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company- wide, divisional, business unit, or individual goals (that may include continued employment or service) or any other basis determined by the Administrator in its sole discretion.

(c) Earning Restricted Stock Units. Upon meeting any applicable vesting criteria, the Participant will have earned the Restricted Stock Units and will be paid as determined in Section 9(d). The Administrator may reduce or waive any criteria that must be met to earn the Restricted Stock Units.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made at the time(s) set forth in the Award Agreement and determined by the Administrator. Unless otherwise provided in the Award Agreement, the Administrator may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

10. Performance Awards.

(a) Award Agreement. Each Performance Award will be evidenced by an Award Agreement that will specify the specify any time period during which any performance objectives or other vesting provisions, if any, will be measured ("Performance Period"), and such other terms and conditions as the Administrator determines.

(b) Objectives or Vesting Provisions and Other Terms. The Administrator will set objectives or vesting provisions that, depending on the extent to which the objectives or vesting provisions are met, will determine the value of the payout for the Performance Awards. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit, or individual goals (that may include continued employment or service) or any other basis determined by the Administrator in its sole discretion.

(c) Form and Timing of Payment. Payment of earned Performance Awards will be made at the time(s) specified in the Award Agreement. Payment with respect to earned Performance Awards will be made in cash, in Shares of equivalent value, or any combination of cash and Shares, with the determination of form of payment made by the Administrator at the time of payment or, in the discretion of the Administrator, at the time of grant.

(d) Value of Performance Awards. Each Performance Award's threshold, target, and maximum payout values will be established by the Administrator on or before the Grant Date.

(e) Earning Performance Awards. After an applicable Performance Period has ended, the holder of a Performance Award will be entitled to receive a payout for the Performance Award earned by the Participant over the Performance Period. The Administrator may reduce or waive any performance objectives or other vesting provisions for such Performance Award.

11. Leaves of Absence/ Reduced or Part-time Work Schedule/Transfer Between Locations/Change of Status.

(a) Leaves of Absence/ Reduced or Part-time Work Schedule/Transfer Between Locations. Unless the Administrator provides otherwise or as otherwise required by Applicable Laws, vesting of Awards granted hereunder will be adjusted or suspended during any unpaid leave of absence in accordance with the Company's leave of absence policy in effect at the time of such leave. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or within the Company Group. In addition, unless the Administrator provides otherwise or as otherwise required by Applicable Laws, if, after the date of grant of a Participant's Award, the Participant commences working on a part-time or reduced work schedule basis, the vesting of such Award will be adjusted in accordance with the Company's reduced work schedule/ part-time policy then in effect. Adjustments or suspensions of vesting pursuant to this Section shall be accomplished in a manner that is exempt from or complies with the requirements of Code Section 409A and the regulations and guidance thereunder.

(b) Employment Status. A Participant will not cease to be a Service Provider in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company (or member of the Company Group) or between the Company or any member of the Company Group.

(c) Incentive Stock Options. With respect to Incentive Stock Options, no such leave may exceed 3 months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then 6 months following the first day of such leave any Incentive Stock Option held by a Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Transferability of Awards. Unless determined otherwise by the Administrator, or otherwise required by Applicable Laws, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, the Award will be limited by any additional terms and conditions imposed by the Administrator. Any unauthorized transfer of an Award will be void.

13. Adjustments; Dissolution or Liquidation.

(a) Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Shares or other securities of the Company, other change in the corporate structure of the Company affecting the Shares, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards

Board Accounting Standards Codification Topic 718 (or any of its successors) affecting the Shares occurs (including a Change in Control), the Administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under the Plan, will adjust the number and class of shares that may be delivered under the Plan and/or the number, class, and price of shares covered by each outstanding Award, and the numerical Share limits in Section 3. Notwithstanding the foregoing, the conversion of any convertible securities of the Company and ordinary course repurchases of Shares or other securities of the Company will not be treated as an event that will require adjustment.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant, at such time prior to the effective date of such proposed transaction as the Administrator determines. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

14. Change in Control or Merger.

(a) Administrator Discretion. If a Change in Control or a merger of the Company with or into another entity occurs (each, a "Transaction"), each outstanding Award will be treated as the Administrator determines (subject to the provisions of this Section), without a Participant's consent, including that such Award be continued by the successor corporation or a Parent or Subsidiary of the successor corporation (or an affiliate thereof) or that the vesting of any such Awards may accelerate automatically upon consummation of a Transaction.

(b) Identical Treatment Not Required. The Administrator need not take the same action or actions with respect to all Awards or portions thereof or with respect to all Participants. The Administrator may take different actions with respect to the vested and unvested portions of an Award. The Administrator will not be required to treat all Awards similarly in the Transaction.

(c) Continuation. An Award will be considered continued if, following the Change in Control or merger:

(i) the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Transaction, the consideration (whether stock, cash, or other securities or property) received in the Transaction by holders of Shares for each Share held on the effective date of the Transaction (and if holders were offered a choice of consideration, the type of consideration received by the holders of a majority of the outstanding Shares) and the Award otherwise is continued in accordance with its terms (including vesting criteria), subject to Section 14(c)(iii) below and Section 13(a); provided that if the consideration received in the Transaction is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon exercising an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, or Performance Award, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the Transaction; or

(ii) the Award is terminated in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the Transaction. Any such cash or property may be subjected to any escrow applicable to holders of Common Stock in the Change in Control. If as of the date of the occurrence of the Transaction the Administrator determines that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment. The amount of cash or property can be subjected to vesting and paid to the Participant over the original vesting schedule of the Award.

(iii) Notwithstanding anything in this Section 14(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the

Company or its successor modifies any of such performance goals without the Participant's consent, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Transaction corporate structure will not invalidate an otherwise valid Award assumption.

(d) Modification. The Administrator will have authority to modify Awards in connection with a Change in Control or merger:

(i) in a manner that causes the Awards to lose their tax-preferred status,

(ii) to terminate any right a Participant has to exercise an Option prior to vesting in the Shares subject to the Option (i.e., "early exercise"), so that following the closing of the Transaction the Option may only be exercised only to the extent it is vested;

(iii) to reduce the Exercise Price subject to the Award in a manner that is disproportionate to the increase in the number of Shares subject to the Award, as long as the amount that would be received upon exercise of the Award immediately before and immediately following the closing of the Transaction is equivalent and the adjustment complies with U.S. Treasury Regulation Section 1.409A- 1(b)(v)(D); and

(iv) to suspend a Participant's right to exercise an Option during a limited period of time preceding and or following the closing of the Transaction without Participant consent if such suspension is administratively necessary or advisable to permit the closing of the Transaction.

(e) Non-Continuation. If the successor corporation does not continue an Award (or some portion such Award), the Participant will fully vest in (and have the right to exercise) 100% of the then-unvested Shares subject to his or her outstanding Options and Stock Appreciation Rights, all restrictions on 100% of the Participant's outstanding Restricted Stock and Restricted Stock Units will lapse, and, regarding 100% of Participant's outstanding Awards with performance-based vesting, all performance goals or other vesting criteria will be treated as achieved at 100% of target levels and all other terms and conditions met, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable. In no event will vesting of an Award accelerate as to more than 100% of the Award. Unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if Options or Stock Appreciation Rights are not continued when a Change in Control or a merger of the Company with or into another corporation or other entity occurs, the Administrator will notify the Participant in writing or electronically that the Participant's vested Options or Stock Appreciation Rights (after considering the foregoing vesting acceleration, if any) will be exercisable for a period of time determined by the Administrator in its sole discretion and all of the Participant's Options or Stock Appreciation Rights will terminate upon the expiration of such period (whether vested or unvested).

15. Outside Director Grants.

(a) With respect to Awards granted to an Outside Director, in the event of a Change in Control, the Participant will fully vest in and have the right to exercise outstanding Options and/or Stock Appreciation Rights as to all of the Shares underlying such Award, including those Shares which otherwise would not be vested or exercisable, all restrictions on other outstanding Awards will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, unless specifically provided otherwise under the applicable Award Agreement, a Company policy related to Director compensation, or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, that specifically references this default rule.

(b) No Outside Director may be paid, issued or granted, in any Fiscal Year, cash retainer fees and equity awards (including any Awards issued under this Plan) with an aggregate value greater than $750,000, increased to $1,000,000 in connection with his or her initial service (with the value of each equity award based on its grant date fair value (determined in accordance with U.S. generally accepted accounting principles)). Any cash compensation paid or Awards granted to an individual for his or her services as an Employee, or for his or her services as a Consultant (other than as an Outside Director), will not count for purposes of the limitation under this Section 15(b).

16. Tax Matters.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash under an Award (or exercise thereof) or such earlier time as any Tax Withholding are due, the Company may deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy any Tax Withholding with respect to such Award or Shares subject to an Award (including upon exercise of an Award).

(b) Withholding Arrangements. The Administrator, in its sole discretion and under such procedures as it may specify from time to time, may elect to satisfy such Tax Withholding, in whole or in part (including in combination) by (without limitation) (i) requiring the Participant to pay cash, check or other cash equivalents, (ii) withholding otherwise deliverable cash (including cash from the sale of Shares issued to the Participant) or Shares having a fair market value equal to the amount required to be withheld or such greater amount (including up to a maximum statutory amount) as the Administrator may determine or permit if such amount does not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (iii) forcing the sale of Shares issued pursuant to an Award (or exercise thereof) having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or any greater amount as the Administrator may determine or permit if such greater amount would not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (iv) requiring the Participant to deliver to the Company already-owned Shares having a fair market value equal to the minimum statutory amount required to be withheld or any greater amount as the Administrator may determine or permit if such greater amount would not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (v) requiring the Participant to engage in a cashless exercise transaction (whether through a broker or otherwise) implemented by the Company in connection with the Plan, (vi) having the Company or a Parent or Subsidiary withhold from wages or any other cash amount due or to become due to the Participant and payable by the Company or any Parent or Subsidiary, or (vii) such other consideration and method of payment for the meeting of Tax Withholding as the Administrator may determine to the extent permitted by Applicable Laws, provided that, in all instances, the satisfaction of the Tax Withholding will not result in any adverse accounting consequence to the Company, as the Administrator may determine in its sole discretion. The fair market value of the Shares to be withheld or delivered will be determined as of the date the amount of tax to be withheld is calculated or such other date as Administrator determines is applicable or appropriate with respect to the Tax Withholding calculation.

(c) Compliance With Code Section 409A. Unless the Administrator determines that compliance with Code Section 409A is not necessary, it is intended that Awards will be designed and operated so that they are either exempt or excepted from the application of Code Section 409A or comply with any requirements necessary to avoid the imposition of additional tax under Code Section 409A(a)(1)(B) so that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A and the Plan and each Award Agreement will be interpreted consistent with this intent. This Section 16(c) is not a guarantee to any Participant of the consequences of his or her Awards. In no event will the Company have any responsibility, liability or obligation to reimburse, indemnify or hold harmless Participant for any taxes that may be imposed or other costs that may be incurred, as a result of Section 409A.

17. Other Terms.

(a) No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right regarding continuing the Participant's relationship as a Service Provider with the Company or member of the Company Group, nor will they interfere with the Participant's right, or the Participant's employer's right, to terminate such relationship at any time free from any liability or claim under the Plan.

(b) Interpretation and Rules of Construction. The words "include," "includes" and "including" when used herein shall be deemed in each case to be followed by the words "without limitation."

(c) Plan Governs. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of any Grant Agreement, the terms and conditions of the Plan will prevail.

(d) Forfeiture Events.

(i) All Awards granted under the Plan will be subject to recoupment under any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd- Frank Wall Street Reform and Consumer Protection Act or other Applicable Laws. In addition, the Administrator may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Administrator determines necessary or appropriate, including without limitation to any reacquisition right regarding previously acquired Shares or other cash or property. Unless this Section 17(d)(i) is specifically mentioned and waived in an Award Agreement or other document, no recovery of compensation under a clawback policy or otherwise will be an event that triggers or contributes to any right of a Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or a member of the Company Group.

(ii) The Administrator may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but will not be limited to, termination of such Participant's status as Service Provider for cause or any specified action or inaction by a Participant that would constitute cause for termination of such Participant's status as a Service Provider.

18. Term of Plan. Subject to Section 21, the Plan will become effective upon the later to occur of (a) its adoption by the Board, (b) approval by the Company's stockholders, or (c) the Effective Date. The Plan will continue in effect until terminated under Section 19, but (i) no Incentive Stock Options may be granted after 10 years from the earlier of the Board or stockholder approval of the Plan and (ii) Section 3(b) relating to automatic share reserve increase will operate only until the tenth anniversary of the earlier of the Board or stockholder approval of the Plan.

19. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Administrator, in its sole discretion, may amend, alter, suspend or terminate the Plan or any part thereof, at any time and for any reason.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary or desirable to comply with Applicable Laws.

(c) Consent of Participants Generally Required. Subject to Section 19(d) below, no amendment, alteration, suspension or termination of the Plan or an Award under it will materially impair the rights of any Participant without a signed, written agreement authorized by the Administrator between the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it regarding Awards granted under the Plan prior to such termination.

(d) Exceptions to Consent Requirement.

(i) A Participant's rights will not be deemed to have been materially impaired by any amendment, alteration, suspension or termination if the Administrator, in its sole discretion, determines that the amendment, alteration, suspension or termination taken as a whole, does not materially impair the Participant's rights; and

(ii) Subject to any limitations of Applicable Laws, the Administrator may amend the terms of any one or more Awards without the affected Participant's consent even if it does materially impair the Participant's right if such amendment is done

(ii) in a manner specified by the Plan,

(iii) to maintain the qualified status of the Award as an Incentive Stock Option under Code Section 422,

(iv) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award only because it impairs the qualified status of the Award as an Incentive Stock Option under Code Section 422,

(v) to clarify the manner of exemption from Code Section 409A or compliance with any requirements necessary to avoid the imposition of additional tax or interest under Code Section 409A(a)(1)(B), or

(vi) to comply with other Applicable Laws.

20. Conditions Upon Issuance of Shares.

(a) Legal Compliance. The Company will make good faith efforts to comply with all Applicable Laws related to the issuance of Shares. Shares will not be issued pursuant to an Award, including without limitation upon exercise or vesting thereof, as applicable, unless the issuance and delivery of such Shares and exercise or vesting of the Award, as applicable, will comply with Applicable Laws. If required by the Administrator, issuance will be further subject to the approval of counsel for the Company with respect to such compliance. If the Company determines it to be impossible or impractical to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any Applicable Laws, registration or other qualification of the Shares under any state, federal or foreign law or under the rules and regulations of the U.S. Securities and Exchange Commission, the stock exchange on which Shares of the same class are then listed, or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, the Company will be relieved of any liability regarding the failure to issue or sell such Shares as to which such authority, registration, qualification or rule compliance was not obtained and the Administrator reserves the authority, without the consent of a Participant, to terminate or cancel Awards with or without consideration in such a situation.

(b) Investment Representations. As a condition to the exercise or vesting of an Award, the Company may require the person exercising such Award to represent and warrant during any such exercise or vesting that the Shares are being purchased only for investment and with no present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

(c) Failure to Accept Award. If a Participant has not accepted an Award to the extent such acceptance has been requested or required by the Company or has not taken all administrative and other steps (e.g., setting up an account with a broker designated by the Company) necessary for the Company to issue Shares upon the vesting, exercise, or settlement of the Award prior to the date that a portion of the Award is scheduled to vest, then the portion of the Award scheduled to vest on such date will be cancelled on such date and the Shares subject to the Award covered by such portion immediately will revert to the Plan for no additional consideration unless otherwise provided by the Administrator.

21. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within 12 months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

Annex H
2024 EMPLOYEE STOCK PURCHASE PLAN

LENZ THERAPEUTICS, INC.

2024 EMPLOYEE STOCK PURCHASE PLAN

1. Purpose. The purpose of the Plan is to provide employees of the Company and its Designated Companies with an opportunity to purchase Common Stock through accumulated Contributions. The Company intends for the Plan to have two components: a component that is intended to qualify as an "employee stock purchase plan" under Code Section 423 (the "423 Component") and a component that is not intended to qualify as an "employee stock purchase plan" under Code Section 423 (the "Non-423 Component"). The provisions of the 423 Component will be administered, interpreted and construed so that all Eligible Employees have equal rights and privileges on a uniform and nondiscriminatory basis so that the 423 Component qualifies as an "employee stock purchase plan" under Code Section 423. The provisions of the Non-423 Component will be granted pursuant to rules, procedures, or sub-plans adopted by the Administrator designed to achieve tax, securities laws, or other objectives for Eligible Employees and the Company. Except as otherwise determined by the Administrator with respect to a particular Offering or as provided herein, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

2. Definitions.

(a) "Administrator" means the Board or any Committee designated by the Board to administer the Plan pursuant to Section 14.

(b) "Affiliate" means any entity, other than a Subsidiary, in which the Company has an equity or other ownership interest.

(c) "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards, including but not limited to the related issuance of shares of Common Stock, including but not limited to, under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where options are, or will be, granted under the Plan.

(d) "Board" means the Board of Directors of the Company.

(e) "Change in Control" means the occurrence of any of the following events:

(i) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, that for this subsection, the acquisition of additional stock by any one Person, who prior to such acquisition is considered to own more than 50% of the total voting power of the stock of the Company will not be considered a Change in Control and provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of 50% or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this Section 2(e)(i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Company which occurs on the date a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the appointment or election; or

(iii) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, that for this Section 2(e)(iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets:

(1) a transfer to an entity controlled by the Company's stockholders immediately after the transfer, or

(2) a transfer of assets by the Company to:

(A) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock,

(B) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company,

(C) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company, or

(D) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in Section 2(e)(iii)(2)(A) to Section 2(e)(iii)(2)(C).

For this definition, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. For this definition, persons will be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company. For the avoidance of doubt, wholly-owned subsidiaries of the Company shall not be considered "Persons" for purposes of this Section 2(e).

(iv) A transaction will not be a Change in Control:

(1) unless the transaction qualifies as a change in control event within the meaning of Code Section 409A; or

(2) if its primary purpose is to (A) change the jurisdiction of the Company's incorporation, or (B) create a holding company owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(f) "Code" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or U.S. Treasury Regulation thereunder will include such section or regulation, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(g) "Committee" means a committee of the Board appointed in accordance with Section 14 hereof.

(h) "Common Stock" means the common stock of the Company.

(i) "Company" means LENZ Therapeutics, Inc., a Delaware corporation (previously named Graphite Bio, Inc.), or any of its successors.

(j) "Compensation" means an Eligible Employee's base straight time gross earnings but excludes payments for commissions, incentive compensation, bonuses, payments for overtime and shift premium, equity compensation income and other similar compensation. For the avoidance of doubt, "Compensation" excludes any payments that an Eligible Employee receives from external sources, including government agencies or insurance carriers, such as disability insurance payments or paid family leave payments, during any leave of absence taken by an Eligible Employee. The Administrator, in its discretion, may, on a uniform and nondiscriminatory basis, establish a different definition of Compensation for a subsequent Offering Period.

(k) "Contributions" means the payroll deductions and other additional payments that the Company may permit to be made by a Participant to fund the exercise of options granted pursuant to the Plan.

(l) "Designated Company" means any Subsidiary or Affiliate of the Company that has been designated by the Administrator from time to time in its sole discretion as eligible to participate in the Plan. For purposes of the 423 Component, only the Company and its Subsidiaries may be Designated Companies, provided, however that at any given time, a Subsidiary that is a Designated Company under the 423 Component will not be a Designated Company under the Non-423 Component.

(m) "Director" means a member of the Board.

(n) "Effective Date" means the date of the consummation of the merger by and between the Company, Lenz Therapeutics, Inc., and certain other parties, pursuant to that certain Agreement and Plan of Merger dated November 14, 2023.

(o) "Eligible Employee" means any individual who is a common law employee providing services to the Company or a Designated Company and is customarily employed for at least 20 hours per week and more than 5 months in any calendar year by the Employer, or any lesser number of hours per week and/or number of months in any calendar year established by the Administrator (if required under applicable local law) for purposes of any separate Offering or the Non-423 Component. For purposes of the Plan, the employment relationship will be treated as continuing intact while the individual is on sick leave or other leave of absence that the Employer approves or is legally protected under Applicable Laws. Where the period of leave exceeds 3 months and the individual's right to reemployment is not guaranteed either by statute or by contract, the employment relationship will be deemed to have terminated 3 months and 1 day following the commencement of such leave. The Administrator, in its discretion, from time to time may, prior to an Enrollment Date for all options to be granted on such Enrollment Date in an Offering, determine (for each Offering under the 423 Component, on a uniform and nondiscriminatory basis or as otherwise permitted by Treasury Regulation Section 1.423-2) that the definition of Eligible Employee will or will not include an individual if he or she: (i) has not completed at least 2 years of service since his or her last hire date (or such lesser period of time as may be determined by the Administrator in its discretion), (ii) customarily works not more than 20 hours per week (or such lesser period of time as may be determined by the Administrator in its discretion), (iii) customarily works not more than 5 months per calendar year (or such lesser period of time as may be determined by the Administrator in its discretion), (iv) is a highly compensated employee within the meaning of Code Section 414(q), or (v) is a highly compensated employee within the meaning of Code Section 414(q) with compensation above a certain level or is an officer or subject to the disclosure requirements of Section 16(a) of the Exchange Act, provided the exclusion is applied with respect to each Offering under the 423 Component in an identical manner to all highly compensated individuals of the Employer whose Eligible Employees are participating in that Offering under the 423 Component. Each exclusion will be applied with respect to an Offering under the 423 Component in a manner complying with U.S. Treasury Regulation Section 1.423-2(e)(2)(ii). Such exclusions may be applied with respect to an Offering under the Non-423 Component without regard to the limitations of Treasury Regulation Section 1.423-2.

(p) "Employer" means the employer of the applicable Eligible Employee(s).

(q) "Enrollment Date" means the first Trading Day of an Offering Period.

(r) "Enrollment Window" means the period established by the Administrator to allow Eligible Employees to make Contribution elections for participation in the Plan with respect to an Offering Period and the requirement to be employed one the last day of the Enrollment Window will be interpreted as a minimum service requirement as described under Section 2(o)(i).

(s) "Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended, including the rules and regulations promulgated thereunder.

(t) "Exercise Date" means the last Trading Day of the Purchase Period. Notwithstanding the foregoing, in the event that an Offering Period is terminated prior to its expiration pursuant to Section 20, the Administrator, in its sole discretion, may determine that any Purchase Period also terminating under such Offering Period will terminate without options being exercised on the Exercise Date that otherwise would have occurred on the last Trading Day of such Purchase Period.

(u) "Fair Market Value" means, as of any date, the value of a share, determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the New York Stock Exchange, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market of The NASDAQ Stock Market, the Fair Market Value will be the closing sales price for a share (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported by such source as the Administrator determines to be reliable. If the determination date for the Fair Market Value occurs on a non-Trading Day (i.e., a weekend or holiday), the Fair Market Value will be such price on the immediately preceding Trading Day, unless otherwise determined by the Administrator;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a share of Common Stock will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date on the last Trading Day such bids and asks were reported), as reported by such source as the Administrator determines to be reliable; or

(iii) Absent an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

Notwithstanding the foregoing, if the determination date for the Fair Market Value occurs on a weekend, holiday or other day other than a Trading Day, the Fair Market Value will be the price as determined under subsections -(u)(i) or -(u)(ii) above on the immediately preceding Trading Day, unless otherwise determined by the Administrator. Note that the determination of fair market value for purposes of Tax Withholding may be made in the Administrator's sole discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.

(v) "Fiscal Year" means a fiscal year of the Company.

(w) "New Exercise Date" means a new Exercise Date if the Administrator shortens any Offering Period then in progress.

(x) "Offering" means an offer under the Plan of an option that may be exercised during an Offering Period as further described in Section 6. For purposes of the Plan, the Administrator may designate separate Offerings under the Plan (the terms of which need not be identical) in which Eligible Employees of one or more Employers will participate, even if the dates of the applicable Offering Periods of each such Offering are identical and the provisions of the Plan will separately apply to each Offering. To the extent permitted by U.S. Treasury Regulation Section 1.423-2(a)(1), the terms of each Offering need not be identical provided that the terms of the Plan and an Offering together satisfy U.S. Treasury Regulation Section 1.423-2(a)(2) and (a)(3).

(y) "Offering Periods" means a period beginning on such date as may be determined by the Administrator in its discretion and ending on such Exercise Date as may be determined by the Administrator in its discretion, in each case on a uniform and nondiscriminatory basis, during which a purchase right granted pursuant to the Plan may be exercised. The duration and timing of Offering Periods may be changed pursuant to Sections 6 and 20.

(z) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(aa) "Participant" means an Eligible Employee that participates in the Plan.

(bb) "Plan" means this LENZ 2024 Employee Stock Purchase Plan.

(cc) "Purchase Period" means the period, as determined by the Administrator in its discretion on a uniform and nondiscriminatory basis, during an Offering Period that commences on the Offering Period's Enrollment Date and ends on the next Exercise Date, except that if the Administrator determines that more than one Purchase Period should occur within an Offering Period, subsequent Purchase Periods within such Offering Period commence after one Exercise Date and end with the next Exercise Date at such time or times as the Administrator determines prior to the commencement of the Offering Period.

(dd) "Purchase Price" means an amount equal to 85% of the Fair Market Value on the Enrollment Date or on the Exercise Date, whichever is lower; provided however, that the Purchase Price may be determined for subsequent Offering Periods by the Administrator subject to compliance with Code Section 423 (or any successor rule or provision or any other Applicable Law, regulation or stock exchange rule) or pursuant to Section 20.

(ee) "Section 409A" or "Code Section 409A" means Code Section 409A and the applicable U.S. Treasury Regulations, and any applicable state law equivalent, as each may be promulgated, amended or modified from time to time.

(ff) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

(gg) "Tax Withholdings" means the Company's or Employer's tax, social insurance and social security liability or premium obligations in connection with the options granted under the Plan, including, without limitation, (i) all federal, state, and local income, employment and any other taxes (including the Participant's U.S. Federal Insurance Contributions Act (FICA) obligation) that are required to be withheld by the Company or the Employer, (ii) the Participant's and, to the extent required by the Company or the Employer, the fringe benefit tax liability of the Company, if any, associated with the grant of an option or purchase of shares of Common Stock under the Plan or sale of shares of Common Stock issued under the Plan, and (iii) any other taxes or social insurance or social security liabilities or premium the responsibility for which the Participant has, or has agreed to bear, with respect to such option, the shares of Common Stock subject to, or other amounts or property payable under, an option, or otherwise associated with or related to participation in the Plan and with respect to which the Company or the Employer has either agreed to withhold or has an obligation to withhold.

(hh) "Trading Day" means a day on which the primary established stock exchange or national market system upon which the Common Stock is listed is open for trading.

(ii) "U.S. Treasury Regulations" means the Treasury Regulations of the Code. Reference to a specific Treasury Regulation will include such Treasury Regulation, the section of the Code under which such regulation was promulgated, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing, or superseding such section or regulation.

3. Eligibility.

(a) Offering Periods. Any individual who is an Eligible Employee (i) as of the first day of the Enrollment Window that ends immediately before a given Enrollment Date and (ii) through the Enrollment Date will be eligible to participate in the Plan with respect to the Offering Period that begins on that Enrollment Date, subject to the requirements of Section 8; provided however, that with respect to the 423 Component, an Employee will constitute an Eligible Employee with respect to a specific Offering to the extent required to comply with Code Section 423.

(b) Non-U.S. Employees. Eligible Employees who are citizens or residents of a non-U.S. jurisdiction (without regard to whether they also are citizens or residents of the United States or resident aliens (within the meaning of Code Section 7701(b)(1)(A))) may be excluded from participation in the Plan or an Offering if the participation of such Eligible Employees is prohibited under the laws of the applicable jurisdiction or if complying with the laws of the applicable jurisdiction would cause the Plan or an Offering to violate Code Section 423. In the case of the Non-423 Component, Eligible Employees may be excluded from participation in the Plan or an Offering if the Administrator determines that participation of such Eligible Employees is not advisable or practicable.

(c) Limitations. Any provisions of the Plan to the contrary notwithstanding, no Eligible Employee will be granted an option under the Plan (i) to the extent that, immediately after the grant, such Eligible Employee (or any other person whose stock would be attributed to such Eligible Employee pursuant to Code Section 424(d)) would own capital stock of the Company or any Parent or Subsidiary of the Company and/or hold outstanding options to purchase such stock possessing 5% or more of the total combined voting power or value of all classes of the capital stock of the Company or of any Parent or Subsidiary of the Company, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans (as defined in Code Section 423) of the Company or any Parent or Subsidiary of the Company accrues at a rate, which exceeds $25,000 worth of stock (determined at the Fair Market Value of the stock at the time such option is granted) for each calendar year in which such option is outstanding at any time, as determined in accordance with Code Section 423 and the regulations thereunder.

4. Offering Periods. The Administrator will have the power to establish Offering Periods and change the duration of Offering Periods (including the commencement and termination dates thereof) without stockholder approval if such change is announced prior to an Enrollment Date for all purchase rights to be granted on such Enrollment Date, provided that no Offering Period may have a duration longer than 27 months.

5. Participation. An Eligible Employee may participate in an Offering under the Plan by submitting, prior to the end of the Enrollment Window for such Offering, a properly completed subscription agreement (which may be similar to the form attached hereto as Exhibit A) authorizing Contributions. Such subscription agreement must be submitted in the form provided by the Administrator for such purpose, which may include an electronic format or any other method designated by the Administrator.

6. Contributions.

(a) At the time a Participant enrolls in the Plan pursuant to Section 8, he or she will elect to have Contributions (in the form of payroll deductions or otherwise, to the extent permitted by the Administrator) made on each pay day during the Offering Period that occurs after the first day of such Offering Period in an amount not to exceed 15% of the Compensation that he or she receives on the pay day. Unless determined otherwise by the Administrator, should a pay day occur on an Exercise Date, a Participant will have any Contributions made on such day applied to his or her account under the then-current Purchase Period or Offering Period with respect to which that Exercise Date relates. The Administrator, in its sole discretion, may permit all Participants in a specified Offering to contribute amounts to the Plan through payment by cash, check or other means communicated to Eligible Employees prior to each Exercise Date of each Purchase Period in the Offering. A

Participant's subscription agreement will remain in effect for successive Offering Periods unless terminated as provided in Section 20 hereof (or Participant's participation is terminated as provided in Section 11 hereof) or modified for the applicable successive Offering Period during the open enrollment period for such Offering Period.

(b) In the event Contributions are made in the form of payroll deductions, such payroll deductions for a Participant will commence on the first pay day following the Enrollment Date and will end on the last pay day on or prior to the last Exercise Date of such Offering Period to which such authorization is applicable, unless sooner terminated by the Participant as provided in Section 20 hereof (or Participant's participation is terminated as provided in Section 11 hereof).

(c) All Contributions made for a Participant will be credited to his or her account under the Plan and Contributions will be made in whole percentages of his or her Compensation only. A Participant may not make any additional payments into such account.

(d) A Participant may discontinue his or her participation in the Plan as provided under Section 20. Changes in the rate of a Participant's contributions may only be made as permitted by the Administrator, as determined in its sole discretion prior to the start of the applicable Offering Period and communicated to Eligible Employees.

(e) Notwithstanding the foregoing, to the extent necessary to comply with Code Section 423(b)(8) and Section 3(c), a Participant's Contributions may be decreased to 0% at any time during a Purchase Period. Subject to Code Section 423(b)(8) and Section 3(c) hereof, Contributions will recommence at the rate originally elected by the Participant effective as of the beginning of the first Purchase Period scheduled to end in the following calendar year, unless terminated by the Participant as provided in Section 20 (or Participant's participation is terminated as provided in Section 11).

(f) Notwithstanding any provisions to the contrary in the Plan, the Administrator may allow Participants to participate in the Plan via cash contributions instead of payroll deductions if (i) payroll deductions are not permitted or advisable under applicable local law, (ii) the Administrator determines that cash contributions are permissible under Code Section 423 for Participants participating in the 423 Component; and/or (iii) the Participants are participating in the Non-423 Component.

(g) At the time the option is exercised, in whole or in part, or at the time some or all of the Common Stock issued under the Plan is disposed of (or at any other time that a taxable event related to the Plan occurs), the Participant must make adequate provision for Tax Withholdings. At any time, the Company or the Employer may, but will not be obligated to, withhold from the Participant's compensation the amount necessary for the Company or the Employer to satisfy applicable Tax Withholdings, including any withholding required to make available to the Company or the Employer any tax deductions or benefits attributable to the sale or early disposition of Common Stock by the Eligible Employee. In addition, the Company or the Employer may, but will not be obligated to, withhold from the proceeds of the sale of Common Stock or use any other method of withholding the Company or the Employer deems appropriate to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f).

7. Grant of Option.

On the Enrollment Date of each Offering Period, each Eligible Employee participating in such Offering Period will be granted an option to purchase on each Exercise Date during such Offering Period (at the applicable Purchase Price) up to a number of shares of Common Stock determined by dividing such Eligible Employee's Contributions accumulated prior to such Exercise Date and retained in the Eligible Employee's account as of the Exercise Date by the applicable Purchase Price; provided that in no event will an Eligible Employee be permitted to purchase during each Purchase Period more than a fixed number shares of Common Stock (subject to any

adjustment pursuant to Section 19) in an amount that the Administrator may establish from time to time, in its discretion and on a uniform and nondiscriminatory basis, for all options to be granted on any Enrollment Date, and provided further that such purchase will be subject to the limitations set forth in Sections 3(c) and 13 and in the subscription agreement. The Eligible Employee may accept the grant of such option, with respect to any Offering Period under the Plan, by electing to participate in the Plan in accordance with the requirements of Section 5. The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of Common Stock that an Eligible Employee may purchase during each Purchase Period and/or Offering Period, as applicable. Exercise of the option will occur as provided in Section 8, unless the Participant has withdrawn pursuant to Section 20 (or Participant's participation is terminated as provided in Section 11). The option will expire on the last day of the Offering Period.

8. Exercise of Option.

(a) Unless a Participant withdraws from the Plan as provided in Section 20 (or Participant's participation is terminated as provided in Section 11), his or her option for the purchase of shares of Common Stock will be exercised automatically on each Exercise Date, and the maximum number of full shares of Common Stock subject to the option will be purchased for such Participant at the applicable Purchase Price with the accumulated Contributions from his or her account. No fractional shares of Common Stock will be purchased; any Contributions accumulated in a Participant's account, which are not sufficient to purchase a full share will be retained in the Participant's account for the subsequent Purchase Period or Offering Period, as applicable, subject to earlier withdrawal by the Participant as provided in Section 20 (or the earlier termination of Participant's participation as provided in Section 11). Any other funds left over in a Participant's account after the Exercise Date will be returned to the Participant. During a Participant's lifetime, a Participant's option to purchase shares of Common Stock hereunder is exercisable only by him or her.

(b) If the Administrator determines that, on a given Exercise Date, the number of shares of Common Stock with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for sale under the Plan on the Enrollment Date of the applicable Offering Period, or (ii) the number of shares of Common Stock available for sale under the Plan on such Exercise Date, the Administrator may in its sole discretion (x) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all Participants exercising options to purchase Common Stock on such Exercise Date, and continue all Offering Periods then in effect or (y) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and terminate any or all Offering Periods then in effect pursuant to Section 20. The Company may make a pro rata allocation of the shares of Common Stock available on the Enrollment Date of any applicable Offering Period pursuant to the preceding sentence, notwithstanding any authorization of additional shares of Common Stock for issuance under the Plan by the Company's stockholders subsequent to such Enrollment Date.

9. Delivery. As soon as reasonably practicable after each Exercise Date on which a purchase of shares of Common Stock occurs, the Company will arrange the delivery to each Participant of the shares of Common Stock purchased upon exercise of his or her option in a form determined by the Administrator (in its sole discretion) and pursuant to rules established by the Administrator. The Company may permit or require that shares of Common Stock be deposited directly with a broker designated by the Company or to a trustee or designated agent of the Company, and the Company may utilize electronic or automated methods of share transfer. The Company may require that shares of Common Stock be retained with such broker, trustee or agent for a designated period of time and/or may establish other procedures to permit tracking of disqualifying dispositions or other dispositions of such shares. No Participant will have any voting, dividend, or other stockholder rights with respect to shares of Common Stock subject to any option granted under the Plan until such shares have been purchased and delivered to the Participant as provided in this Section 8.

10. Withdrawal.

(a) A Participant may withdraw all but not less than all the Contributions credited to his or her account and not yet used to exercise his or her option under the Plan at any time by (i) submitting to the Company's stock administration office (or its designee) a written notice of withdrawal in the form determined by the Administrator for such purpose (which may be similar to the form attached hereto as Exhibit B), or (ii) following an electronic or other withdrawal procedure determined by the Administrator. The Administrator may set forth a deadline of when a withdrawal must occur to be effective prior to a given Exercise Date in accordance with policies it may approve from time to time. All of the Participant's Contributions credited to his or her account will be paid to such Participant as soon as administratively practicable after receipt of notice of withdrawal and such Participant's option for the Offering Period will be automatically terminated, and no further Contributions for the purchase of shares of Common Stock will be made for such Offering Period. If a Participant withdraws from an Offering Period, Contributions will not resume at the beginning of the succeeding Offering Period, unless the Participant re-enrolls in the Plan in accordance with the provisions of Section 5.

(b) A Participant's withdrawal from an Offering Period will not have any effect on his or her eligibility to participate in any similar plan that may hereafter be adopted by the Company or in succeeding Offering Periods that commence after the termination of the Offering Period from which the Participant withdraws.

11. Termination of Employment. Upon a Participant's ceasing to be an Eligible Employee, for any reason, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to such Participant's account during the Offering Period but not yet used to purchase shares of Common Stock under the Plan will be returned to such Participant or, in the case of his or her death, to the person or persons entitled thereto under Section 15, and such Participant's option will be automatically terminated. Unless determined otherwise by the Administrator in a manner that, with respect to an Offering under the 423 Component, is permitted by, and compliant with, Code Section 423, a Participant whose employment transfers between entities through a termination with an immediate rehire (with no break in service) by the Company or a Designated Company will not be treated as terminated under the Plan; however, if a Participant transfers from an Offering under the 423 Component to the Non-423 Component, the exercise of the option will be qualified under the 423 Component only to the extent it complies with Code Section 423; further, no Participant shall be deemed to switch from an Offering under the Non-423 Component to an Offering under the 423 Component or vice versa unless (and then only to the extent) such switch would not cause the 423 Component or any option thereunder to fail to comply with Code Section 423.

12. No Interest. No interest will accrue on the Contributions of a participant in the Plan, except as may be required by Applicable Law, as determined by the Company, and if so required by the laws of a particular jurisdiction, will, with respect to Offerings under the 423 Component, apply to all Participants in the relevant Offering, except to the extent otherwise permitted by U.S. Treasury Regulation Section 1.423-2(f).

13. Stock.

(a) Subject to adjustment upon changes in capitalization of the Company as provided in Section 19 hereof, the maximum number of shares of Common Stock that will be made available for sale under the Plan will be 1,756,970 shares of Common Stock. The number of shares of Common Stock available for issuance under the Plan will be increased on the first day of each Fiscal Year beginning for the Fiscal Year following the Fiscal Year in which the first Enrollment Date (if any) occurs equal to the least of (i) 2,635,455 shares of Common Stock, (ii) 1% of the outstanding shares of Common Stock on the last day of the immediately preceding Fiscal Year, or (iii) an amount determined by the Administrator.

(b) Until the shares of Common Stock are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), a Participant will have only the rights of an unsecured creditor with respect to such shares, and no right to vote or receive dividends or any other rights as a stockholder will exist with respect to such shares.

(c) Shares of Common Stock to be delivered to a Participant under the Plan will be registered in the name of the Participant or, if so required under Applicable Laws, in the name of the Participant and his or her spouse.

14. Administration. The Plan will be administered by the Board or a Committee appointed by the Board, which Committee will be constituted to comply with Applicable Laws. The Administrator will have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to delegate ministerial duties to any of the Company's employees, to designate separate Offerings under the Plan, to designate Subsidiaries and Affiliates of the Company as participating in the 423 Component or Non-423 Component, to determine eligibility, to adjudicate all disputed claims filed under the Plan and to establish such procedures that it deems necessary or advisable for the administration of the Plan (including, without limitation, to adopt such procedures, sub-plans, and appendices to the enrollment agreement as are necessary or appropriate to permit the participation in the Plan by employees who are foreign nationals or employed outside the U.S., the terms of which sub-plans and appendices may take precedence over other provisions of this Plan, with the exception of Section 13(a) hereof, but unless otherwise superseded by the terms of such sub-plan or appendix, the provisions of this Plan will govern the operation of such sub-plan or appendix). Unless otherwise determined by the Administrator, the Eligible Employees eligible to participate in each sub-plan will participate in a separate Offering under the 423 Component, or if the terms would not qualify under the 423 Component, in the Non-423 Component, in either case unless such designation would cause the 423 Component to violate the requirements of Code Section 423. Without limiting the generality of the foregoing, the Administrator is specifically authorized to adopt rules and procedures regarding eligibility to participate, the definition of Compensation, handling of Contributions, making of Contributions to the Plan (including, without limitation, in forms other than payroll deductions), establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of stock certificates that vary with applicable local requirements. The Administrator also is authorized to determine that, to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f), the terms of an option granted under the Plan or an Offering to citizens or residents of a non-U.S. jurisdiction will be less favorable than the terms of options granted under the Plan or the same Offering to employees resident solely in the U.S. Every finding, decision, and determination made by the Administrator will, to the full extent permitted by law, be final and binding upon all parties. Each finding, decision, and determination made by the Administrator will be administered, interpreted and construed as necessary so that, with respect to the 423 Component, all Eligible Employees have equal rights and privileges on a uniform and nondiscriminatory basis enabling the 423 Component to qualify as an "employee stock purchase plan" under Code Section 423.

15. Designation of Beneficiary.

(a) If permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any shares of Common Stock and cash, if any, from the Participant's account under the Plan in the event of such Participant's death subsequent to an Exercise Date on which the option is exercised but prior to delivery to such Participant of such shares and cash. In addition, if permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any cash from the Participant's account under the Plan in the event of such Participant's death prior to exercise of the option. If a Participant is married and the designated beneficiary is not the spouse, spousal consent will be required for such designation to be effective.

(b) Such designation of beneficiary may be changed by the Participant at any time by notice in a form determined by the Administrator. In the event of the death of a Participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such Participant's death, the Company will deliver such shares and/or cash to the executor or administrator of the estate of the Participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

(c) All beneficiary designations will be in such form and manner as the Administrator may designate from time to time. Notwithstanding Sections 15(a) and (b) above, the Company and/or the Administrator may decide not to permit such designations by Participants in non-U.S. jurisdictions to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f).

16. Transferability. Neither Contributions credited to a Participant's account nor any rights with regard to the exercise of an option or to receive shares of Common Stock under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15 hereof) by the Participant. Any such attempt at assignment, transfer, pledge or other disposition will be without effect, except that the Company may treat such act as an election to withdraw funds from an Offering Period in accordance with Section 20 hereof.

17. Use of Funds. The Company may use all Contributions received or held by it under the Plan for any corporate purpose, and the Company will not be obligated to segregate such Contributions except under Offerings or for Participants in the Non-423 Component for which Applicable Laws require that Contributions to the Plan by Participants be segregated from the Company's general corporate funds and/or deposited with an independent third party. Until shares of Common Stock are issued, Participants will have only the rights of an unsecured creditor with respect to such shares.

18. Reports. Individual accounts will be maintained for each Participant in the Plan. Statements of account will be given to participating Eligible Employees at least annually, which statements will set forth the amounts of Contributions, the Purchase Price, the number of shares of Common Stock purchased and the remaining cash balance, if any.

19. Adjustments, Dissolution, Liquidation, Merger, or Change in Control.

(a) Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares or other securities of the Company, other change in the corporate structure of the Company affecting the shares of Common Stock, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any of its successors) affecting the shares of Common Stock occurs (including a Change in Control), the Administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under the Plan, will adjust the number and class of shares of Common Stock that may be delivered under the Plan, the Purchase Price per share, the class and the number of shares of Common Stock covered by each option under the Plan that has not yet been exercised, and the numerical limits of Sections 13 and 13.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, any Offering Period then in progress will be shortened by setting a New Exercise Date, and will terminate immediately prior to the consummation of such proposed dissolution or liquidation, unless provided otherwise by the Administrator. The New Exercise Date will be before the date of the Company's proposed dissolution or liquidation. The Administrator will notify each Participant in writing or electronically, prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant has withdrawn from the Offering Period as provided in Section 20 hereof (or, prior to such New Exercise Date, Participant's participation has terminated as provided in Section 11 hereof).

(c) Merger or Change in Control. In the event of a merger of the Company with or into another corporation or other entity or Change in Control, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the option, the Offering Period with respect to which

such option relates will be shortened by setting a New Exercise Date on which such Offering Period will end. The New Exercise Date will occur before the date of the Company's proposed merger or Change in Control. The Administrator will notify each Participant in writing or electronically prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant has withdrawn from the Offering Period as provided in Section 20 hereof (or, prior to such New Exercise Date, Participant's participation has terminated as provided in Section 11 hereof).

20. Amendment or Termination.

(a) The Administrator, in its sole discretion, may amend, suspend, or terminate the Plan, or any part thereof, at any time and for any reason. If the Plan is terminated, the Administrator, in its discretion, may elect to terminate all outstanding Offering Periods either immediately or upon completion of the purchase of shares of Common Stock on the next Exercise Date (which may be sooner than originally scheduled, if determined by the Administrator in its discretion), or may elect to permit Offering Periods to expire in accordance with their terms (and subject to any adjustment pursuant to Section 19). If the Offering Periods are terminated prior to expiration, all amounts then credited to Participants' accounts that have not been used to purchase shares of Common Stock will be returned to the Participants (without interest thereon, except as otherwise required under Applicable Laws, as further set forth in Section 12 hereof) as soon as administratively practicable.

(b) Without stockholder consent and without limiting Section 20(a), the Administrator will be entitled to change the Offering Periods and/or Purchase Periods, designate separate Offerings, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit Contributions in excess of the amount designated by a Participant in order to adjust for delays or mistakes in the Company's processing of properly completed Contribution elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with Contribution amounts, and establish such other limitations or procedures as the Administrator determines in its sole discretion advisable that are consistent with the Plan.

(c) In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Administrator may, in its discretion and, to the extent necessary or desirable, modify, amend or terminate the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) amending the Plan to conform with the safe harbor definition under the Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto), including with respect to an Offering Period underway at the time;

(ii) altering the Purchase Price for any Offering Period or Purchase Period including an Offering Period or Purchase Period underway at the time of the change in Purchase Price;

(iii) shortening any Offering Period or Purchase Period by setting a New Exercise Date, including an Offering Period or Purchase Period underway at the time of the Administrator action;

(iv) reducing the maximum percentage of Compensation a Participant may elect to set aside as Contributions; and

(v) reducing the maximum number of shares of Common Stock a Participant may purchase during any Offering Period or Purchase Period.

Such modifications or amendments will not require stockholder approval or the consent of any Participants.

21. Notices. All notices or other communications by a Participant to the Company under or in connection with the Plan will be deemed to have been duly given when received in the form and manner specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares of Common Stock will not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto will comply with all applicable provisions of law, domestic or foreign, including, without limitation, the U.S. Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and will be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Code Section 409A. The Plan is intended to be exempt from the application of Section 409A, and, to the extent not exempt, is intended to comply with Section 409A and any ambiguities herein will be interpreted to so be exempt from, or comply with, Section 409A. In furtherance of the foregoing and notwithstanding any provision in the Plan to the contrary, if the Administrator determines that an option granted under the Plan may be subject to Section 409A or that any provision in the Plan would cause an option under the Plan to be subject to Section 409A, the Administrator may amend the terms of the Plan and/or of an outstanding option granted under the Plan, or take such other action the Administrator determines is necessary or appropriate, in each case, without the Participant's consent, to exempt any outstanding option or future option that may be granted under the Plan from or to allow any such options to comply with Section 409A, but only to the extent any such amendments or action by the Administrator would not violate Section 409A. Notwithstanding the foregoing, the Company and any of its Parent, Subsidiaries or Affiliates shall have no obligation or liability to reimburse, indemnify, or hold harmless a Participant or any other party for any taxes or costs that may be imposed on or incurred by a Participant or any other person as a result of Section 409A, including but not limited to if the option to purchase Common Stock under the Plan that is intended to be exempt from or compliant with Section 409A is not so exempt or compliant or for any action taken by the Administrator with respect thereto. The Company makes no representation that the option to purchase Common Stock under the Plan is compliant with or exempt from Section 409A.

24. Term of Plan. The Plan will become effective upon the later to occur of (i) its adoption by the Board or (ii) the Effective Date. It will continue in effect for a term of 20 years, unless sooner terminated under Section 20.

25. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within 12 months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

26. Governing Law. The Plan will be governed by, and construed in accordance with, the laws of the State of Delaware (except its choice-of-law provisions).

27. No Right to Employment. Participation in the Plan by a Participant will not be construed as giving a Participant the right to be retained as an employee of the Company or a Subsidiary or Affiliate of the Company, as applicable. Further, the Company or a Subsidiary or Affiliate of the Company may dismiss a Participant from employment at any time, free from any liability or any claim under the Plan.

28. Severability. If any provision of the Plan is or becomes or is deemed to be invalid, illegal, or unenforceable for any reason in any jurisdiction or as to any Participant, such invalidity, illegality or

unenforceability will not affect the remaining parts of the Plan, and the Plan will be construed and enforced as to such jurisdiction or Participant as if the invalid, illegal or unenforceable provision had not been included.

29. Compliance with Applicable Laws. The terms of this Plan are intended to comply with all Applicable Laws and will be construed accordingly.

30. Automatic Transfer to Low Price Offering Period. To the extent permitted by Applicable Laws, if the Fair Market Value on any Exercise Date in an Offering Period is lower than the Fair Market Value on the Enrollment Date of such Offering Period, then all Participants in such Offering Period automatically will be withdrawn from such Offering Period immediately after the exercise of their option on such Exercise Date and automatically re-enrolled in the immediately following Offering Period as of the first day thereof.

EXHIBIT A

LENZ THERAPEUTICS, INC.

2024 EMPLOYEE STOCK PURCHASE PLAN

SUBSCRIPTION AGREEMENT

____ Original Application Offering Date: _____

____ Change in Payroll Deduction Rate

1. ("Employee") hereby elects to participate in the LENZ 2024 Employee Stock Purchase Plan (the "Plan") and subscribes to purchase shares of the Company's Common Stock in accordance with this Subscription Agreement and the Plan. Any capitalized terms not specifically defined in this Subscription Agreement will have the meaning ascribed to them under the Plan.

2. I hereby authorize and consent to payroll deductions from each paycheck in the amount of % of my Compensation (from 1% to fifteen percent (15%)); a decrease in rate may be to 0%) during the Offering Period in accordance with the Plan. (Please note that no fractional percentages are permitted.) I understand that, subject to the terms and conditions of the Plan, I may not change the rate of my Contributions during an Offering Period.

3. I understand that said payroll deductions will be accumulated for the purchase of shares of Common Stock at the applicable Purchase Price determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise my option and purchase Common Stock under the Plan. I further understand that if I am outside of the U.S., my payroll deductions will be converted to U.S. dollars at an exchange rate selected by the Company on the purchase date.

4. I have received a copy of the complete Plan and its accompanying prospectus. I understand that my participation in the Plan is in all respects subject to the terms of the Plan.

5. Shares of Common Stock purchased for me under the Plan should be issued in the name(s) of the Eligible Employee.

6. If I am a U.S. taxpayer, I understand that if I dispose of any shares received by me pursuant to the Plan within 2 years after the Offering Date (the first day of the Offering Period during which I purchased such shares) or 1 year after the Exercise Date, I will be treated for federal income tax purposes as having received ordinary income at the time of such disposition in an amount equal to the excess of the fair market value of the shares at the time such shares were purchased by me over the price that I paid for the shares. I hereby agree to notify the Company in writing within 30 days after the date of any disposition of my shares and I will make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the disposition of the Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or benefits attributable to sale or early disposition of Common Stock by me. If I dispose of such shares at any time after the expiration of the 2-year and 1-year holding periods, I understand that I will be treated for federal income tax purposes as having received income only at the time of such disposition, and that such income will be taxed as ordinary income only to the extent of an amount equal to the lesser of (a) the excess of the fair market value of the shares at the time of such disposition over the purchase price which I paid for the shares, or (b) 15% of the fair market value of the shares on the first day of the Offering Period. The remainder of the gain, if any, recognized on such disposition will be taxed as capital gain.

7. For employees that may be subject to tax in non U.S. jurisdictions, I acknowledge and agree that, regardless of any action taken by the Company or any Designated Company with respect to any or all income tax, social security, social insurances, National Insurance Contributions, payroll tax, fringe benefit, or other

tax-related items related to my participation in the Plan and legally applicable to me including, without limitation, in connection with the grant of such options, the purchase or sale of shares of Common Stock acquired under the Plan and/or the receipt of any dividends on such shares ("Tax-Related Items"), the ultimate liability for all Tax-Related Items is and remains my responsibility and may exceed the amount actually withheld by the Company or a Designated Company. Furthermore, I acknowledge that the Company and/or any Designated Company (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the options under the Plan and (b) do not commit to and are under no obligation to structure the terms of the grant of options or any aspect of my participation in the Plan to reduce or eliminate my liability for Tax-Related Items or achieve any particular tax result. Further, if I have become subject to tax in more than one jurisdiction between the date of my enrollment and the date of any relevant taxable or tax withholding event, as applicable, I acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the purchase of shares of Common Stock under the Plan or any other relevant taxable or tax withholding event, as applicable, I agree to make adequate arrangements satisfactory to the Company and/or the applicable Designated Company to satisfy all Tax-Related Items. In this regard, I authorize the Company and/or the applicable Designated Company, or their respective agents, at their discretion, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following: (a) withholding from my wages or Compensation paid to me by the Company and/or the applicable Designated Company; or (b) withholding from proceeds of the sale of the shares of Common Stock purchased under the Plan either through a voluntary sale or through a mandatory sale arranged by the Company (on my behalf pursuant to this authorization). Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable maximum withholding rates, in which case I will receive a refund of any over-withheld amount in cash and will have no entitlement to the Common Stock equivalent.

Finally, I agree to pay to the Company or the applicable Designated Company any amount of Tax-Related Items that the Company or the applicable Designated Company may be required to withhold as a result of my participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to purchase shares of Common Stock under the Plan on my behalf and/or refuse to issue or deliver the shares or the proceeds of the sale of shares if I fail to comply with my obligations in connection with the Tax-Related Items.

8. By electing to participate in the Plan, I acknowledge, understand and agree that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent provided for in the Plan;

(b) all decisions with respect to future grants under the Plan, if applicable, will be at the sole discretion of the Company;

(c) the grant of options under the Plan shall not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company, or any Designated Company, and shall not interfere with the ability of the Company or any Designated Company, as applicable, to terminate my employment (if any);

(d) I am voluntarily participating in the Plan;

(e) the options granted under the Plan and the shares of Common Stock underlying such options, and the income and value of same, are not intended to replace any pension rights or compensation;

(f) the options granted under the Plan and the shares of Common Stock underlying such options, and the income and value of same, are not part of my normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments;

(g) the future value of the shares of Common Stock offered under the Plan is unknown, indeterminable and cannot be predicted with certainty;

(h) the shares of Common Stock that I acquire under the Plan may increase or decrease in value, even below the Purchase Price;

(i) no claim or entitlement to compensation or damages shall arise from the forfeiture of options granted to me under the Plan as a result of the termination of my status as an Eligible Employee (for any reason whatsoever, and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where I am employed or the terms of my employment agreement, if any) and, in consideration of the grant of options under the Plan to which I am otherwise not entitled, I irrevocably agree never to institute a claim against the Company, or any Designated Company, waive my ability, if any, to bring such claim, and release the Company, and any Designated Company from any such claim that may arise; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, I shall be deemed irrevocably to have agreed to not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; and

(j) in the event of the termination of my status as an Eligible Employee (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where I am employed or the terms of my employment agreement, if any), my right to participate in the Plan and any options granted to me under the Plan, if any, will terminate effective as of the date that I am no longer actively employed by the Company or one of its Designated Companies and, in any event, will not be extended by any notice period mandated under the employment laws in the jurisdiction in which I am employed or the terms of my employment agreement, if any (*e.g.*, active employment would not include a period of "garden leave" or similar period pursuant to the employment laws in the jurisdiction in which I am employed or the terms of my employment agreement, if any); the Company shall have the exclusive discretion to determine when I am no longer actively employed for purposes of my participation in the Plan (including whether I may still be considered to be actively employed while on a leave of absence).

9. I understand that the Company and/or any Designated Company may collect, where permissible under applicable law certain personal information about me, including, but not limited to, my name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of Common Stock or directorships held in the Company, details of all options granted under the Plan or any other entitlement to shares of Common Stock awarded, canceled, exercised, vested, unvested or outstanding in my favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan. I understand that Company may transfer my Data to the United States, which is not considered by the European Commission to have data protection laws equivalent to the laws in my country. I understand that the Company will transfer my Data to its designated broker, or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan. I understand that the recipients of the Data may be located in the United States or elsewhere, and that a recipient's country of operation (e.g., the United States) may have different, including less stringent, data privacy laws that the European Commission or my jurisdiction does not consider to be equivalent to the protections in my country. I understand that I may request a list with the names and addresses of any potential recipients of the Data by contacting my local human resources representative. I authorize the Company, the Company's designated broker and any other possible recipients which may assist the Company with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purpose of implementing, administering and managing my participation in the Plan. I understand that Data will be held only as long as is necessary to implement, administer and manage my participation in the Plan. I understand that that I may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing my local human resources representative. Further, I understand that I am providing the consents herein on a purely voluntary basis. If I do not consent, or if

I later seek to revoke my consent, my employment status or career with the Company or any Designated Company will not be adversely affected; the only adverse consequence of refusing or withdrawing my consent is that the Company would not be able to grant me options under the Plan or other equity awards, or administer or maintain such awards. Therefore, I understand that refusing or withdrawing my consent may affect my ability to participate in the Plan. For more information on the consequences of my refusal to consent or withdrawal of consent, I understand that I may contact my local human resources representative.

If I am an employee outside the U.S., I understand that in accordance with applicable law, I have the right to access, and to request a copy of, the Data held about me. I also understand that I have the right to discontinue the collection, processing, or use of my Data, or supplement, correct, or request deletion of my Data. To exercise my rights, I may contact my local human resources representative.

I hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of my personal data as described herein and any other Plan materials by and among, as applicable, the Company and its Subsidiaries for the exclusive purpose of implementing, administering and managing my participation in the Plan. I understand that my consent will be sought and obtained for any processing or transfer of my data for any purpose other than as described in the enrollment form and any other plan materials.

10. If I have received the Subscription Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control, subject to applicable laws.

11. The provisions of the Subscription Agreement and these appendices are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

12. Notwithstanding any provisions in this Subscription Agreement, I understand that if I am working or resident in a country other than the United States, my participation in the Plan shall also be subject to the additional terms and conditions set forth on Appendix A and any special terms and conditions for my country set forth on Appendix A. Moreover, if I relocate to one of the countries included in Appendix A, the special terms and conditions for such country will apply to me to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Appendix A constitutes part of this Subscription Agreement and the provisions of this Subscription Agreement govern each Appendix (to the extent not superseded or supplemented by the terms and conditions set forth in the applicable Appendix).

13. I hereby agree to be bound by the terms of the Plan. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

Employee's Social Security Number (for U.S.-based employees): _____

Employee's Address: _____

_____

_____

_____

I UNDERSTAND THAT THIS SUBSCRIPTION AGREEMENT WILL REMAIN IN EFFECT THROUGHOUT SUCCESSIVE OFFERING PERIODS UNLESS TERMINATED BY ME.

Dated: _____ _____

Signature of Employee

EXHIBIT B

LENZ THERAPEUTICS, INC.

2024 EMPLOYEE STOCK PURCHASE PLAN

NOTICE OF WITHDRAWAL

Any capitalized terms not specifically defined in this Notice of Withdrawal will have the meaning ascribed to them under the 2024 Employee Stock Purchase Plan (the "Plan").

The undersigned Participant in the Offering Period of the LENZ 2024 Employee Stock Purchase Plan that began on _____, ____ (the "Offering Date") hereby notifies the Company that he or she hereby withdraws from the Offering Period. He or she hereby directs the Company to pay to the undersigned as promptly as practicable all the payroll deductions credited to his or her account with respect to such Offering Period. The undersigned understands and agrees that his or her option for such Offering Period will be terminated automatically. The undersigned understands further that no further payroll deductions will be made for the purchase of shares in the current Offering Period and the undersigned will be eligible to participate in succeeding Offering Periods only by delivering to the Company a new Subscription Agreement.

Name and Address of Participant:

_____

_____

_____

Signature:

_____

Date: _____

Annex I

Section 262 of the Delaware General Corporation Law

§ 262. Appraisal rights

(a) Any stockholder of a corporation of this State who holds shares of stock on the date of the making of a demand pursuant to subsection (d) of this section with respect to such shares, who continuously holds such shares through the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, who has otherwise complied with subsection (d) of this section and who has neither voted in favor of the merger, consolidation, conversion, transfer, domestication or continuance nor consented thereto in writing pursuant to § 228 of this title shall be entitled to an appraisal by the Court of Chancery of the fair value of the stockholder's shares of stock under the circumstances described in subsections (b) and (c) of this section. As used in this section, the word "stockholder" means a holder of record of stock in a corporation; the words "stock" and "share" mean and include what is ordinarily meant by those words; the words "depository receipt" mean a receipt or other instrument issued by a depository representing an interest in 1 or more shares, or fractions thereof, solely of stock of a corporation, which stock is deposited with the depository; the words "beneficial owner" mean a person who is the beneficial owner of shares of stock held either in voting trust or by a nominee on behalf of such person; and the word "person" means any individual, corporation, partnership, unincorporated association or other entity.

(b) Appraisal rights shall be available for the shares of any class or series of stock of a constituent, converting, transferring, domesticating or continuing corporation in a merger, consolidation, conversion, transfer, domestication or continuance to be effected pursuant to § 251 (other than a merger effected pursuant to § 251(g) of this title), § 252, § 254, § 255, § 256, § 257, § 258, § 263, § 264, § 266 or § 390 of this title (other than, in each case and solely with respect to a converted or domesticated corporation, a merger, consolidation, conversion, transfer, domestication or continuance authorized pursuant to and in accordance with the provisions of § 265 or § 388 of this title):

(1) Provided, however, that no appraisal rights under this section shall be available for the shares of any class or series of stock, which stock, or depository receipts in respect thereof, at the record date fixed to determine the stockholders entitled to receive notice of the meeting of stockholders, or at the record date fixed to determine the stockholders entitled to consent pursuant to § 228 of this title, to act upon the agreement of merger or consolidation or the resolution providing for the conversion, transfer, domestication or continuance (or, in the case of a merger pursuant to § 251(h) of this title, as of immediately prior to the execution of the agreement of merger), were either: (i) listed on a national securities exchange or (ii) held of record by more than 2,000 holders; and further provided that no appraisal rights shall be available for any shares of stock of the constituent corporation surviving a merger if the merger did not require for its approval the vote of the stockholders of the surviving corporation as provided in § 251(f) of this title.

(2) Notwithstanding paragraph (b)(1) of this section, appraisal rights under this section shall be available for the shares of any class or series of stock of a constituent, converting, transferring, domesticating or continuing corporation if the holders thereof are required by the terms of an agreement of merger or consolidation, or by the terms of a resolution providing for conversion, transfer, domestication or continuance, pursuant to § 251, § 252, § 254, § 255, § 256, § 257, § 258, § 263, § 264, § 266 or § 390 of this title to accept for such stock anything except:

a. Shares of stock of the corporation surviving or resulting from such merger or consolidation, or of the converted entity or the entity resulting from a transfer, domestication or continuance if such entity is a corporation as a result of the conversion, transfer, domestication or continuance, or depository receipts in respect thereof;

b. Shares of stock of any other corporation, or depository receipts in respect thereof, which shares of stock (or depository receipts in respect thereof) or depository receipts at the effective date of

the merger, consolidation, conversion, transfer, domestication or continuance will be either listed on a national securities exchange or held of record by more than 2,000 holders;

c. Cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a. and b. of this section; or

d. Any combination of the shares of stock, depository receipts and cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a., b. and c. of this section.

(3) In the event all of the stock of a subsidiary Delaware corporation party to a merger effected under § 253 or § 267 of this title is not owned by the parent immediately prior to the merger, appraisal rights shall be available for the shares of the subsidiary Delaware corporation.

(4) [Repealed.]

(c) Any corporation may provide in its certificate of incorporation that appraisal rights under this section shall be available for the shares of any class or series of its stock as a result of an amendment to its certificate of incorporation, any merger or consolidation in which the corporation is a constituent corporation, the sale of all or substantially all of the assets of the corporation or a conversion effected pursuant to § 266 of this title or a transfer, domestication or continuance effected pursuant to § 390 of this title. If the certificate of incorporation contains such a provision, the provisions of this section, including those set forth in subsections (d), (e), and (g) of this section, shall apply as nearly as is practicable.

(d) Appraisal rights shall be perfected as follows:

(1) If a proposed merger, consolidation, conversion, transfer, domestication or continuance for which appraisal rights are provided under this section is to be submitted for approval at a meeting of stockholders, the corporation, not less than 20 days prior to the meeting, shall notify each of its stockholders who was such on the record date for notice of such meeting (or such members who received notice in accordance with § 255(c) of this title) with respect to shares for which appraisal rights are available pursuant to subsection (b) or (c) of this section that appraisal rights are available for any or all of the shares of the constituent corporations or the converting, transferring, domesticating or continuing corporation, and shall include in such notice either a copy of this section (and, if 1 of the constituent corporations or the converting corporation is a nonstock corporation, a copy of § 114 of this title) or information directing the stockholders to a publicly available electronic resource at which this section (and, § 114 of this title, if applicable) may be accessed without subscription or cost. Each stockholder electing to demand the appraisal of such stockholder's shares shall deliver to the corporation, before the taking of the vote on the merger, consolidation, conversion, transfer, domestication or continuance, a written demand for appraisal of such stockholder's shares; provided that a demand may be delivered to the corporation by electronic transmission if directed to an information processing system (if any) expressly designated for that purpose in such notice. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such stockholder's shares. A proxy or vote against the merger, consolidation, conversion, transfer, domestication or continuance shall not constitute such a demand. A stockholder electing to take such action must do so by a separate written demand as herein provided. Within 10 days after the effective date of such merger, consolidation, conversion, transfer, domestication or continuance, the surviving, resulting or converted entity shall notify each stockholder of each constituent or converting, transferring, domesticating or continuing corporation who has complied with this subsection and has not voted in favor of or consented to the merger, consolidation, conversion, transfer, domestication or continuance, and any beneficial owner who has demanded appraisal under paragraph (d)(3) of this section, of the date that the merger, consolidation or conversion has become effective; or

(2) If the merger, consolidation, conversion, transfer, domestication or continuance was approved pursuant to § 228, § 251(h), § 253, or § 267 of this title, then either a constituent, converting,

transferring, domesticating or continuing corporation before the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, or the surviving, resulting or converted entity within 10 days after such effective date, shall notify each stockholder of any class or series of stock of such constituent, converting, transferring, domesticating or continuing corporation who is entitled to appraisal rights of the approval of the merger, consolidation, conversion, transfer, domestication or continuance and that appraisal rights are available for any or all shares of such class or series of stock of such constituent, converting, transferring, domesticating or continuing corporation, and shall include in such notice either a copy of this section (and, if 1 of the constituent corporations or the converting, transferring, domesticating or continuing corporation is a nonstock corporation, a copy of § 114 of this title) or information directing the stockholders to a publicly available electronic resource at which this section (and § 114 of this title, if applicable) may be accessed without subscription or cost. Such notice may, and, if given on or after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, shall, also notify such stockholders of the effective date of the merger, consolidation, conversion, transfer, domestication or continuance. Any stockholder entitled to appraisal rights may, within 20 days after the date of giving such notice or, in the case of a merger approved pursuant to § 251(h) of this title, within the later of the consummation of the offer contemplated by § 251(h) of this title and 20 days after the date of giving such notice, demand in writing from the surviving, resulting or converted entity the appraisal of such holder's shares; provided that a demand may be delivered to such entity by electronic transmission if directed to an information processing system (if any) expressly designated for that purpose in such notice. Such demand will be sufficient if it reasonably informs such entity of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such holder's shares. If such notice did not notify stockholders of the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, either (i) each such constituent corporation or the converting, transferring, domesticating or continuing corporation shall send a second notice before the effective date of the merger, consolidation, conversion, transfer, domestication or continuance notifying each of the holders of any class or series of stock of such constituent, converting, transferring, domesticating or continuing corporation that are entitled to appraisal rights of the effective date of the merger, consolidation, conversion, transfer, domestication or continuance or (ii) the surviving, resulting or converted entity shall send such a second notice to all such holders on or within 10 days after such effective date; provided, however, that if such second notice is sent more than 20 days following the sending of the first notice or, in the case of a merger approved pursuant to § 251(h) of this title, later than the later of the consummation of the offer contemplated by § 251(h) of this title and 20 days following the sending of the first notice, such second notice need only be sent to each stockholder who is entitled to appraisal rights and who has demanded appraisal of such holder's shares in accordance with this subsection and any beneficial owner who has demanded appraisal under paragraph (d)(3) of this section. An affidavit of the secretary or assistant secretary or of the transfer agent of the corporation or entity that is required to give either notice that such notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. For purposes of determining the stockholders entitled to receive either notice, each constituent corporation or the converting, transferring, domesticating or continuing corporation may fix, in advance, a record date that shall be not more than 10 days prior to the date the notice is given, provided, that if the notice is given on or after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, the record date shall be such effective date. If no record date is fixed and the notice is given prior to the effective date, the record date shall be the close of business on the day next preceding the day on which the notice is given.

(3) Notwithstanding subsection (a) of this section (but subject to this paragraph (d)(3)), a beneficial owner may, in such person's name, demand in writing an appraisal of such beneficial owner's shares in accordance with either paragraph (d)(1) or (2) of this section, as applicable; provided that (i) such beneficial owner continuously owns such shares through the effective date of the merger, consolidation, conversion, transfer, domestication or continuance and otherwise satisfies the

requirements applicable to a stockholder under the first sentence of subsection (a) of this section and (ii) the demand made by such beneficial owner reasonably identifies the holder of record of the shares for which the demand is made, is accompanied by documentary evidence of such beneficial owner's beneficial ownership of stock and a statement that such documentary evidence is a true and correct copy of what it purports to be, and provides an address at which such beneficial owner consents to receive notices given by the surviving, resulting or converted entity hereunder and to be set forth on the verified list required by subsection (f) of this section.

(e) Within 120 days after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, the surviving, resulting or converted entity, or any person who has complied with subsections (a) and (d) of this section and who is otherwise entitled to appraisal rights, may commence an appraisal proceeding by filing a petition in the Court of Chancery demanding a determination of the value of the stock of all such stockholders. Notwithstanding the foregoing, at any time within 60 days after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, any person entitled to appraisal rights who has not commenced an appraisal proceeding or joined that proceeding as a named party shall have the right to withdraw such person's demand for appraisal and to accept the terms offered upon the merger, consolidation, conversion, transfer, domestication or continuance. Within 120 days after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, any person who has complied with the requirements of subsections (a) and (d) of this section, upon request given in writing (or by electronic transmission directed to an information processing system (if any) expressly designated for that purpose in the notice of appraisal), shall be entitled to receive from the surviving, resulting or converted entity a statement setting forth the aggregate number of shares not voted in favor of the merger, consolidation, conversion, transfer, domestication or continuance (or, in the case of a merger approved pursuant to § 251(h) of this title, the aggregate number of shares (other than any excluded stock (as defined in § 251(h)(6)d. of this title)) that were the subject of, and were not tendered into, and accepted for purchase or exchange in, the offer referred to in § 251(h)(2) of this title)), and, in either case, with respect to which demands for appraisal have been received and the aggregate number of stockholders or beneficial owners holding or owning such shares (provided that, where a beneficial owner makes a demand pursuant to paragraph (d)(3) of this section, the record holder of such shares shall not be considered a separate stockholder holding such shares for purposes of such aggregate number). Such statement shall be given to the person within 10 days after such person's request for such a statement is received by the surviving, resulting or converted entity or within 10 days after expiration of the period for delivery of demands for appraisal under subsection (d) of this section, whichever is later.

(f) Upon the filing of any such petition by any person other than the surviving, resulting or converted entity, service of a copy thereof shall be made upon such entity, which shall within 20 days after such service file in the office of the Register in Chancery in which the petition was filed a duly verified list containing the names and addresses of all persons who have demanded appraisal for their shares and with whom agreements as to the value of their shares have not been reached by such entity. If the petition shall be filed by the surviving, resulting or converted entity, the petition shall be accompanied by such a duly verified list. The Register in Chancery, if so ordered by the Court, shall give notice of the time and place fixed for the hearing of such petition by registered or certified mail to the surviving, resulting or converted entity and to the persons shown on the list at the addresses therein stated. The forms of the notices by mail and by publication shall be approved by the Court, and the costs thereof shall be borne by the surviving, resulting or converted entity.

(g) At the hearing on such petition, the Court shall determine the persons who have complied with this section and who have become entitled to appraisal rights. The Court may require the persons who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any person fails to comply with such direction, the Court may dismiss the proceedings as to such person. If immediately before the merger, consolidation, conversion, transfer, domestication or continuance the shares of the class or series of stock of the constituent, converting, transferring, domesticating or continuing corporation as to which appraisal rights are available were listed on a national

securities exchange, the Court shall dismiss the proceedings as to all holders of such shares who are otherwise entitled to appraisal rights unless (1) the total number of shares entitled to appraisal exceeds 1% of the outstanding shares of the class or series eligible for appraisal, (2) the value of the consideration provided in the merger, consolidation, conversion, transfer, domestication or continuance for such total number of shares exceeds $1 million, or (3) the merger was approved pursuant to § 253 or § 267 of this title.

(h) After the Court determines the persons entitled to an appraisal, the appraisal proceeding shall be conducted in accordance with the rules of the Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceeding the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger, consolidation, conversion, transfer, domestication or continuance, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all relevant factors. Unless the Court in its discretion determines otherwise for good cause shown, and except as provided in this subsection, interest from the effective date of the merger, consolidation, conversion, transfer, domestication or continuance through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger, consolidation or conversion and the date of payment of the judgment. At any time before the entry of judgment in the proceedings, the surviving, resulting or converted entity may pay to each person entitled to appraisal an amount in cash, in which case interest shall accrue thereafter as provided herein only upon the sum of (1) the difference, if any, between the amount so paid and the fair value of the shares as determined by the Court, and (2) interest theretofore accrued, unless paid at that time. Upon application by the surviving, resulting or converted entity or by any person entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the persons entitled to an appraisal. Any person whose name appears on the list filed by the surviving, resulting or converted entity pursuant to subsection (f) of this section may participate fully in all proceedings until it is finally determined that such person is not entitled to appraisal rights under this section.

(i) The Court shall direct the payment of the fair value of the shares, together with interest, if any, by the surviving, resulting or converted entity to the persons entitled thereto. Payment shall be so made to each such person upon such terms and conditions as the Court may order. The Court's decree may be enforced as other decrees in the Court of Chancery may be enforced, whether such surviving, resulting or converted entity be an entity of this State or of any state.

(j) The costs of the proceeding may be determined by the Court and taxed upon the parties as the Court deems equitable in the circumstances. Upon application of a person whose name appears on the list filed by the surviving, resulting or converted entity pursuant to subsection (f) of this section who participated in the proceeding and incurred expenses in connection therewith, the Court may order all or a portion of such expenses, including, without limitation, reasonable attorney's fees and the fees and expenses of experts, to be charged pro rata against the value of all the shares entitled to an appraisal not dismissed pursuant to subsection (k) of this section or subject to such an award pursuant to a reservation of jurisdiction under subsection (k) of this section.

(k) Subject to the remainder of this subsection, from and after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, no person who has demanded appraisal rights with respect to some or all of such person's shares as provided in subsection (d) of this section shall be entitled to vote such shares for any purpose or to receive payment of dividends or other distributions on such shares (except dividends or other distributions payable to stockholders of record at a date which is prior to the effective date of the merger, consolidation, conversion, transfer, domestication or continuance). If a person who has made a demand for an appraisal in accordance with this section shall deliver to the surviving, resulting or converted entity a written withdrawal of such person's demand for an appraisal in respect of some or all of such person's shares in accordance with subsection (e) of this section, either within 60 days after such effective date or thereafter with the written approval of the corporation, then the right of such person to an appraisal of the shares subject to the withdrawal shall cease. Notwithstanding the

foregoing, an appraisal proceeding in the Court of Chancery shall not be dismissed as to any person without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just, including without limitation, a reservation of jurisdiction for any application to the Court made under subsection (j) of this section; provided, however that this provision shall not affect the right of any person who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such person's demand for appraisal and to accept the terms offered upon the merger, consolidation, conversion, transfer, domestication or continuance within 60 days after the effective date of the merger, consolidation, conversion, transfer, domestication or continuance, as set forth in subsection (e) of this section. If a petition for an appraisal is not filed within the time provided in subsection (e) of this section, the right to appraisal with respect to all shares shall cease.

(l) The shares or other equity interests of the surviving, resulting or converted entity to which the shares of stock subject to appraisal under this section would have otherwise converted but for an appraisal demand made in accordance with this section shall have the status of authorized but not outstanding shares of stock or other equity interests of the surviving, resulting or converted entity, unless and until the person that has demanded appraisal is no longer entitled to appraisal pursuant to this section.

Table of Contents

Annex J

FORM OF GRAPHITE BIO, INC. PROXY CARD

GRAPHITE BIO, INC.
611 GATEWAY BLVD., SUITE 120
SOUTH SAN FRANCISCO, CA 94080

VOTE BY INTERNET
Before The Meeting - Go to **www.proxyvote.com or scan the QR Barcode above**

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 p.m. Eastern Time on March 13, 2024. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to **www.virtualshareholdermeeting.com/GRPH2024SM**

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS
If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 p.m. Eastern Time on March 13, 2024. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V27145-S78126 KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

GRAPHITE BIO, INC. (“Graphite”)

		For	Against	Abstain
The Graphite Board of Directors recommends you vote FOR the following proposal:				
1.	To approve (i) the issuance of shares of Graphite’s common stock, which will represent more than 20% of the shares of Graphite’s common stockoutstanding immediately prior to the merger, to stockholders of Lenz Therapeutics, Inc. (“LENZ”), pursuant to the terms of the Agreement and Plan of Merger, dated as of November 14, 2023, by and between Graphite LENZ and Generate Merger Sub, Inc. (the “Merger Agreement”, and such transaction proposed thereby, the “merger”), and pursuant to Nasdaq Listing Rule 5635(a), (ii) the change of control of Graphite resulting from the merger pursuant to Nasdaq Listing Rule 5635(b), and (iii) the issuance of shares of Graphite’s common stock to certain institutional investors (the “PIPE Investors”) pursuant to Nasdaq Listing Rule 5635(d), which shares of Graphite’s common stock will represent more than 20% of the shares of Graphite’s common stock outstanding as of the date of the execution of that certainsubscription agreement, dated as of November 14, 2023, by and between the PIPE Investors and Graphite.	☐	☐	☐
The Graphite Board of Directors recommends you vote FOR the following proposal:				
2.	To approve an amendment to Graphite’s certificate of incorporation to (i) effect a reverse stock split of Graphite’s issued common stock at a ratio in the range between 1:6 and 1:12, inclusive, with the final ratio and effectiveness of all other ratios of such amendment and the abandonment of such amendment to be mutually agreed by the board of directors of Graphite (the “Graphite Board of Directors”) and the board of directors of LENZ prior to the effective time and (ii) change Graphite’s name to “LENZ Therapeutics, Inc.”, effective as of the effective time under the Merger Agreement.	☐	☐	☐
The Graphite Board of Directors recommends you vote FOR the following proposal:				
3.	To approve the 2024 Plan (as defined in the related proxy statement/prospectus).	☐	☐	☐
The Graphite Board of Directors recommends you vote FOR the following proposal:				
4.	To approve the 2024 ESPP (as defined in the related proxy statement/prospectus).	☐	☐	☐
The Graphite Board of Directors recommends you vote FOR the following proposal:				
5.	To approve an adjournment of Graphite’s special meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal No. 1 and/or Proposal No. 2.	☐	☐	☐

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)	Date

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting:
The Notice and Proxy Statement is available at www.proxyvote.com.

V27146-S78126

GRAPHITE BIO, INC.
Special Meeting of Stockholders
March 14, 2024 9:00 AM PT
This proxy is solicited by the Graphite Board of Directors

The undersigned hereby appoint(s) Kimberlee C. Drapkin and Perry Karsen, and each or any of them, as proxies, each with the power to appoint his or her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of Graphite Bio, Inc. that the undersigned is/are entitled to vote at the Special Meeting of Stockholders of Graphite Bio, Inc. to be held at 9:00 AM PT at www.virtualshareholdermeeting.com/GRPH2024SM on March 14, 2024 and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Graphite Board of Directors' recommendations.

Continued and to be signed on reverse side