

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

January 31, 2024

Kimberlee Drapkin Chief Executive Officer Graphite Bio, Inc. 611 Gateway Blvd, Suite 120 South San Francisco, CA 94080

> Re: Graphite Bio, Inc. Amendment No. 2 to Registration Statement on Form S-4 Filed January 18, 2024 File No. 333-275919

Dear Kimberlee Drapkin:

We have reviewed your amended registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our January 4, 2024 letter.

Amendment No. 1 to Registration Statement on Form S-4

The Merger

Background of the Merger, page 133

1. We note your response to our prior comment 13 and reissue. You state on page 153 that "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 expenses 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 and obviated a need for a post-closing CVR agreement." Please revise your disclosure to clarify how the increase of \$1.5 million was determined and agreed upon. In your disclosure in this section please include negotiations relating to this term, including any proposals and counter-proposals and explain how you reached agreement on the final increase or otherwise advise. Kimberlee Drapkin Graphite Bio, Inc. January 31, 2024 Page 2

2. We note your response to our prior comments 14 and 15 and reissue in part. Please revise your disclosure to discuss how the material terms were negotiated and agreed upon for each of your agreements related to your legacy assets. In addition, please revise your disclosure to describe in greater detail the specific "outreach efforts" conducted prior to entering into the agreements or otherwise advise.

Certain Unaudited Prospective Financial Information, page 162

3. We note that you included projections for the quarter ended December 31, 2023. Please revise to clarify whether Lenz Therapeutics, Inc.'s actual results for the quarter ended December 31, 2023 were in line with your projections or otherwise advise. In addition, please revise to clarify whether you still believe that the projections, and the fairness opinion that partially relies on those projections, are reasonable.

Graphite's Management's Discussion and Analysis of Financial Condition and Results of Operations

License and Option to Acquire Nula-Cel Assets, page 346

- 4. We note your response to prior comment 24 and are unable to concur with your analysis that the license and option agreement is not a material contract under Item 601(b)(10). Please revise your disclosure to describe the material terms of the license an option agreement as amended and file the agreements as exhibits pursuant to Item 601(b)(10) of Regulation S-K.
- 5. You state that "[a]s of December 31, 2023, Kamau has not achieved the financial milestones and does not have the right to exercise the option." Please identify the financial milestones that need to be achieved by Kamau and any dates such milestones need to be met by or otherwise.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets, page 346

6. We note your response to prior comment 25 and are unable to concur with your analysis that the APA is not a material contract under Item 601(b)(10). Please revise your disclosure to describe the material terms of the APA and file the agreement as an exhibit pursuant to Item 601(b)(10) of Regulation S-K. In addition, please revise your disclosure to disclose the royalty rate or range that does not exceed a ten point range.

<u>General</u>

7. We note your response to prior comment 28. We do not agree with the analysis and conclusion set forth in your response letter. We note your disclosure on page 33 and elsewhere that, "Graphite currently has no ongoing programs…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

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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." Please refer to footnote 943 of the Special Purpose Acquisition Companies, Shell Companies, and Projection adopting release (Release Nos. 33-11265; 34-99418; IC-35096), available at https://www.sec.gov/files/rules/final/2024/33-11265.pdf.

Please contact Eric Atallah at 202-551-3663 or Lynn Dicker at 202-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Doris Stacey Gama at 202-551-3188 or Jason Drory at 202-551-8342 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Andrew Goodman, Esq.