

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

February 9, 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. 3 to Registration Statement on Form S-4 Filed February 5, 2024 File No. 333-275919

Dear Kimberlee Drapkin:

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

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.

Amendment No. 3 to Registration Statement on Form S-4 filed February 5, 2024

<u>Litigation Related to the Merger, page 23</u>

1. Please provide the disclosures required by Item 103 of Regulation S-K, including, for example only, the relief sought.

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.