

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

July 26, 2022

Josh Lehrer Chief Executive Officer Graphite Bio, Inc. 201 Haskins Way, Suite 210 South San Francisco, CA 94080

Re: Graphite Bio, Inc.
Registration Statement on Form S-3
Filed July 21, 2022
File No. 333-266262

Dear Mr. Lehrer:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Christine Westbrook at 202-551-5019 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Maggie Wong, Esq.