GRAPHITE BIO, INC.

Science and Technology Committee Charter

Organization

The Science and Technology Committee of the Board of Directors (the "Committee") of Graphite Bio, Inc. (the "Company") was established pursuant to the bylaws of the Company.

The Board of Directors of the Company (the "**Board**") may appoint Committee members for such terms as may be determined by the Board from time to time. In determining whether a director is eligible to serve as a Committee member, the Board may consider the director's scientific, regulatory, medical and technical expertise, as well as any other relevant operational or business experience. The Board may also, in its discretion, appoint a Chairperson for the Committee. At the direction of the Nominating and Corporate Governance Committee of the Board, the Committee shall periodically evaluate its own performance.

The Board may remove or replace any Committee member at any time, with or without cause. Resignation or removal of a director from the Board, for whatever reason, shall automatically constitute resignation or removal, as applicable, from the Committee. Vacancies occurring on the Committee, for whatever reason, may be filled only by the Board.

Purpose

The purpose of the Committee is to assist the Board's oversight of the Company's research and development activities and to advise the Board with respect to strategic scientific and clinical considerations.

Meetings

The Committee generally is to meet at such times and places as it deems appropriate, either in person or by conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, with any additional meetings as deemed necessary by the Committee. A majority of the members of the Committee shall constitute a quorum for purposes of holding a meeting and the Committee may act by a vote of a majority of members present at such meeting. In lieu of a meeting, the Committee may act by unanimous written consent. The Chairperson of the Committee, in consultation with the other members and management, may set meeting agendas consistent with this Charter.

Duties and Responsibilities

The Committee shall have the following specific duties and responsibilities:

- Review, evaluate and advise the Board and management regarding the Company's research and development strategy and plans.
- Review, evaluate and advise the Board and management regarding the quality, direction and competitiveness of the Company's research and development programs.

- Assist the Board and the Compensation Committee of the Board (the "Compensation Committee") in setting and evaluating any research or development performance goals under the Company's incentive compensation programs.
- Assist the Board and the Compensation Committee in assessing the capabilities of and evaluating the performance of the Company's key scientific and technical personnel, and the depth and breadth of the Company's scientific resources.
- Assist the Board and the Audit Committee of the Board in reviewing and assessing items
 of enterprise risk associated with the Company's research and development activities,
 clinical development and intellectual property.
- Review and assist the Board on other topics and perform other functions as may be requested by the Board from time to time.
- The Committee may review and reassess the adequacy of this Charter periodically and submit any proposed changes to the Board for approval.

In addition to the specific powers set forth in this Charter, the Committee shall have such powers as may be necessary or appropriate for it to efficiently carry out its duties hereunder.

General

- The Committee shall regularly update the Board about its activities and recommendations upon request of the Board.
- The Committee shall have full access to all books and records of the Company in carrying out its duties under this charter.
- The Committee shall have the authority to request that any officer or employee of the Company or the Company's outside legal counsel attend a meeting of the Committee.
- The Committee may establish and delegate authority to one or more subcommittees consisting of one or more of its members, when the Committee deems it appropriate to do so in order to carry out its responsibilities.
- In carrying out its responsibilities, the Committee shall be entitled to rely upon advice and information that it receives in its discussions and communications with management and any experts, advisors and professionals with whom the Committee may consult.

Adopted June 18, 2021, effective as of June 24, 2021.