BIOXCEL THERAPEUTICS, INC.

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE CHARTER

A. PURPOSE

The purpose of the Nominating and Corporate Governance Committee (the "Committee") of the Board of Directors (the "Board") of BioXcel Therapeutics, Inc. (the "Company") is to, among other things:

- identify individuals qualified to become Board members consistent with the criteria approved by the Board;
- recommend to the Board the persons to be nominated for election as directors at any
 meeting of stockholders and the persons (if any) to be elected by the Board to fill any
 vacancies on the Board;
- recommend to the Board the directors to be appointed to each committee of the Board;
- develop and recommend to the Board corporate governance guidelines; and
- oversee the evaluation of the Board and its committees.

B. STRUCTURE AND MEMBERSHIP

- 1. <u>Number</u>. The Committee shall consist of such number of directors as the Board shall from time to time determine.
- 2. <u>Independence</u>. Except as otherwise permitted by the applicable rules of The Nasdaq Stock Market LLC ("*Nasdaq*"), each member of the Committee shall satisfy the independence requirements under the applicable Nasdaq rules.
- 3. <u>Chair.</u> Unless the Board elects a Chair of the Committee, the Committee may elect a Chair by majority vote.
- 4. <u>Compensation</u>. The compensation of Committee members shall be as determined by the Board.
- 5. <u>Selection and Removal</u>. Members of the Committee shall be appointed by the Board. The Board may remove members from the Committee, with or without cause.
- 6. <u>Rules and Procedures</u>. The Committee has the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company's bylaws that are applicable to the Committee.

C. AUTHORITY AND RESPONSIBILITIES

1. <u>General</u>.

The Committee shall discharge its responsibilities, and shall assess the information provided to it by the Company's management and others, in accordance with its business judgment.

2. <u>Board and Committee Membership.</u>

- (a) <u>Selection of Director Nominees</u>. Except where the Company is legally required by contract, bylaw or otherwise to provide third parties with the right to nominate directors, the Committee shall be responsible for (a) identifying individuals qualified to become Board members, consistent with criteria approved by the Board, and (b) recommending to the Board the nominees for election as directors at any meeting of stockholders and the persons to be elected by the Board to fill any vacancies on the Board. In making such recommendations, the Committee shall consider candidates proposed by stockholders. The Committee shall review and evaluate information available to it regarding candidates proposed by stockholders and shall apply the same criteria, and shall follow substantially the same process in considering them, as it does in considering other candidates. The Committee may adopt, and periodically review and revise, as it deems appropriate, procedures regarding director candidates proposed by stockholders.
- (b) <u>Criteria for Selecting Directors</u>. The criteria to be used by the Committee in recommending directors and by the Board in nominating directors are as set forth in the Company's corporate governance guidelines.
- (c) <u>Search Firms</u>. The Committee shall have the authority to retain and terminate any search firm to be used to identify director nominees, including authority to approve the search firm's fees and other retention terms. The Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of any search firm engaged by the Committee.
- (d) <u>Board Committees</u>. The Committee shall be responsible for recommending to the Board the directors to be appointed to each committee of the Board. The Committee may periodically review the composition of each Board committee and make recommendations to the Board for changes or rotation of committee members, the creation of additional Board committees, or the dissolution of Board committees.
- (e) <u>Request Director Resignations Pursuant to Corporate Governance Guidelines</u>. The Committee shall recommend whether or not the Board should request the resignation of a director from the Board in accordance with the Company's corporate governance guidelines.

3. Corporate Governance

- (a) <u>Corporate Governance Guidelines</u>. The Committee shall develop and recommend to the Board corporate governance guidelines applicable to the Company. The Committee shall, from time to time as it deems appropriate, review and reassess the adequacy of such corporate governance guidelines and recommend any proposed changes to the Board for approval.
- (b) <u>Board Leadership Structure</u>. The Committee shall periodically review the Board's leadership structure to assess whether it is appropriate given the specific characteristics and circumstances of the Company.
- (c) <u>Director Changes in Position or Circumstances</u>. The Committee may review any notification by a director of his or her resignation or material changes in employment or of circumstances that may adversely reflect upon the director or the Company that is provided in accordance with the Corporate Governance Guidelines. Based on this review, the Committee may recommend that the Board request such director to resign from the Board.

4. Evaluation of the Board and its Committees

The Committee shall be responsible for overseeing a periodic self-evaluation of the Board and its committees to determine whether the Board and its committees are functioning effectively.

5. <u>Additional Duties</u>. In addition to the duties and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities consistent with this Charter, the purposes of the Committee, the Company's organizational documents and applicable Nasdaq rules.

D. PROCEDURES AND ADMINISTRATION

- 1. <u>Meetings</u>. The Committee shall meet as often as it deems necessary in order to perform its responsibilities. The Committee may also act by unanimous written consent in lieu of a meeting. The Committee shall keep such records of its meetings.
- 2. <u>Subcommittees</u>. The Committee may form and delegate authority to one or more subcommittees as it deems appropriate from time to time under the circumstances.
- 3. <u>Reports to the Board</u>. The Committee shall report regularly to the Board regarding the activities of the Committee.
- 4. <u>Charter Review</u>. The Committee shall, from time to time as it deems appropriate, review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.
- 5. <u>Advisors</u>. The Committee is authorized, without further action by the Board, to engage such legal and other advisors as it deems necessary or appropriate to carry out its responsibilities. Such advisors may be the regular advisors to the Company. The Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of such advisors as established by the Committee.
- 6. <u>Investigations</u>. The Committee shall have the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it shall deem appropriate, including the authority to request any officer, employee or advisor of the Company to meet with the Committee or any advisors engaged by the Committee.
 - 7. <u>Self-Evaluation</u>. The Committee shall periodically evaluate its own performance.

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Effective Date: May 3, 2023