

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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Under § 240.14a-12

BioXcel Therapeutics, Inc.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- No fee required.
 - Fee paid previously with preliminary materials.
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.
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BioXcel Therapeutics, Inc.
555 Long Wharf Drive
New Haven, CT 06511

November 12, 2025

Dear Stockholders:

On behalf of the Board of Directors, I cordially invite you to attend the 2025 annual meeting of stockholders (the “Annual Meeting”) of BioXcel Therapeutics, Inc., which will be held on Friday, December 12, 2025, beginning at 9:00 a.m., Eastern Time. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast at www.virtualshareholdermeeting.com/BTAI2025.

Our Board of Directors has established the close of business on October 31, 2025 as the “record date” for the Annual Meeting. This means that you are entitled to notice of, and to vote at, the Annual Meeting or any continuations, adjournments, and postponements thereof if our stock records show that you owned our common stock at that time.

In accordance with the rules of the Securities and Exchange Commission (the “SEC”), we have elected to provide our proxy materials to our stockholders using the “full set delivery option” in connection with the Annual Meeting, pursuant to Rule 14a-16(n) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). As a result, we are delivering to our stockholders paper copies of the accompanying Proxy Statement and form of proxy card (collectively, the “Proxy Materials”) by mail. In addition to delivery of the Proxy Materials to our stockholders, we will post the Proxy Materials on a publicly accessible website and provide information to our stockholders about how to access the website.

Attached to this letter are a Notice of Annual Meeting of Stockholders and Proxy Statement, which describe the business to be conducted at the meeting.

Your vote is important to us. Please act as soon as possible to vote your shares. It is important that your shares be represented at the meeting whether or not you plan to attend the annual meeting via the Internet. Please vote electronically over the Internet, by telephone or by returning your signed proxy card in the envelope provided. You may also vote your shares online during the Annual Meeting. Instructions on how to vote while participating at the meeting live via the Internet are posted at www.virtualshareholdermeeting.com/BTAI2025.

On behalf of the Board of Directors and management, it is my pleasure to express our appreciation for your continued support.

A handwritten signature in black ink, appearing to read 'P. Mueller'.

Peter Mueller, Ph.D.
Chairman of the Board



BioXcel Therapeutics, Inc.
555 Long Wharf Drive
New Haven, CT 06511

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
 TO BE HELD ON DECEMBER 12, 2025**

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of BioXcel Therapeutics, Inc., a Delaware corporation, will be held on Friday, December 12, 2025, at 9:00 a.m., Eastern Time. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast. You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/BTAI2025. For instructions on how to attend and vote your shares at the Annual Meeting, see the information in the accompanying Proxy Statement in the section titled “General Information about the Annual Meeting and Voting — How can I attend and vote at the Annual Meeting?”

The Annual Meeting is being held:

1. to elect June Bray, Sandeep Laumas, M.D. and David Mack, as Class I directors to hold office until the Company’s annual meeting of stockholders to be held in 2028 and until their respective successors have been duly elected and qualified;
2. to ratify the appointment of Ernst & Young LLP as the Company’s independent registered public accounting firm for 2025;
3. to approve, on an advisory (non-binding) basis, the compensation of our named executive officers (“Say-on-Pay Vote”);
4. to approve an amendment to our Amended and Restated Certificate of Incorporation, as amended (“Certificate of Incorporation”) to effect, within 12 months following the date of stockholder approval and solely if the Board determines that it is necessary and advisable to regain* compliance with the minimum bid price requirements of the Nasdaq Capital Market, a reverse stock split at a ratio of not less than 1-for-2 and not greater than 1-for-20, with the exact ratio to be set within that range by the Board (the “Reverse Stock Split Proposal”);
5. to authorize one or more adjournments of the Annual Meeting to solicit additional proxies in the event there are insufficient votes to approve Proposal 4 described above (the “Adjournment Proposal”); and
6. to transact such other business as may properly come before the Annual Meeting or any continuation, postponement or adjournment thereof.

These items of business are described in the Proxy Statement that follows this notice. Holders of record of our common stock as of the close of business on October 31, 2025 are entitled to notice of and to vote at the Annual Meeting, or any continuation, postponement or adjournment thereof.

Your vote is important. Voting your shares will ensure the presence of a quorum at the Annual Meeting and will save us the expense of further solicitation. Please promptly vote your shares by following the instructions for voting on the Notice Regarding the Availability of Proxy Materials or, if you received a paper or electronic

* *The Company is currently in compliance with the minimum bid price requirements of the Nasdaq Capital Market and is submitting this proposal as a precautionary measure to provide additional flexibility to address any potential future deficiency with respect to the Nasdaq minimum bid price requirements.*

copy of our proxy materials, by completing, signing, dating and returning your proxy card or by Internet or telephone voting as described on your proxy card.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read 'J. Rodriguez', written in a cursive style.

Javier Rodriguez
Chief Legal Officer and Corporate Secretary

New Haven, CT
November 12, 2025

We will commence mailing this proxy statement and form of proxy card to all stockholders of record entitled to notice of, and to vote at, the Annual Meeting, on or about November 12, 2025.

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting: This Proxy Statement and our Annual Report are available free of charge at www.proxyvote.com.



TABLE OF CONTENTS

	Page
<u>GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING</u>	<u>1</u>
<u>When and where will the Annual Meeting be held?</u>	<u>1</u>
<u>What are the purposes of the Annual Meeting?</u>	<u>1</u>
<u>Are there any matters to be voted on at the Annual Meeting that are not included in this Proxy Statement?</u>	<u>2</u>
<u>Who is entitled to vote at the Annual Meeting?</u>	<u>2</u>
<u>What is the difference between being a “record holder” and holding shares in “street name”?</u>	<u>2</u>
<u>What do I do if my shares are held in “street name”?</u>	<u>2</u>
<u>How many shares must be present to hold the Annual Meeting?</u>	<u>2</u>
<u>What are “broker non-votes”?</u>	<u>2</u>
<u>What if a quorum is not present at the Annual Meeting?</u>	<u>3</u>
<u>How do I vote my shares without attending the Annual Meeting?</u>	<u>3</u>
<u>How can I attend and vote at the Annual Meeting?</u>	<u>3</u>
<u>What if during the check-in time or during the Annual Meeting I have technical difficulties or trouble accessing the virtual meeting website?</u>	<u>3</u>
<u>How does the Board recommend that I vote?</u>	<u>4</u>
<u>How many votes are required to approve each proposal?</u>	<u>4</u>
<u>What if I do not specify how my shares are to be voted?</u>	<u>5</u>
<u>Who will count the votes?</u>	<u>5</u>
<u>Can I revoke or change my vote after I submit my proxy?</u>	<u>5</u>
<u>Who will pay for the cost of this proxy solicitation?</u>	<u>5</u>
<u>Why hold a virtual meeting?</u>	<u>6</u>
<u>Will I be able to ask questions at the Annual Meeting?</u>	<u>6</u>
<u>PROPOSAL NO. 1 — ELECTION OF DIRECTORS</u>	<u>7</u>
<u>Board Size and Structure</u>	<u>7</u>
<u>Current Directors and Terms</u>	<u>7</u>
<u>Nominees for Director</u>	<u>7</u>
<u>Information About Board Nominees and Continuing Directors</u>	<u>7</u>
<u>Class I Directors Whose Terms Expire at the 2025 Annual Meeting</u>	<u>8</u>
<u>Class II Directors Whose Terms Expire at the 2026 Annual Meeting</u>	<u>9</u>
<u>Class III Director Nominees for Election to Three Year Terms Expiring at the 2027 Annual Meeting</u>	<u>10</u>
<u>Board Recommendation</u>	<u>10</u>
<u>PROPOSAL NO. 2 — RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	<u>11</u>
<u>Appointment of Independent Registered Public Accounting Firm</u>	<u>11</u>
<u>Audit, Audit-Related, Tax and All Other Fees</u>	<u>11</u>
<u>Pre-Approval Policies and Procedures</u>	<u>11</u>
<u>Board Recommendation</u>	<u>12</u>
<u>Audit Committee Report</u>	<u>12</u>

	<u>Page</u>
<u>PROPOSAL NO. 3 — APPROVAL, ON AN ADVISORY (NON-BINDING) BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</u>	<u>13</u>
<u>Board Recommendation</u>	<u>13</u>
<u>PROPOSAL NO. 4 — APPROVAL OF A PROPOSED AMENDMENT TO OUR AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, TO EFFECT A REVERSE SPLIT OF OUR OUTSTANDING COMMON STOCK IF DETERMINED NECESSARY BY OUR BOARD</u>	<u>14</u>
<u>General</u>	<u>14</u>
<u>Reasons for Reverse Stock Split</u>	<u>14</u>
<u>Determination of the Reverse Stock Split Ratio</u>	<u>15</u>
<u>Impact of the Reverse Stock Split, if Implemented</u>	<u>15</u>
<u>Certain Risk Factors Associated with the Reverse Stock Split or Nasdaq Delisting</u>	<u>17</u>
<u>Procedure for Effecting the Reverse Stock Split</u>	<u>18</u>
<u>Material Federal Income Tax Consequences</u>	<u>19</u>
<u>Vote Required</u>	<u>20</u>
<u>Board Recommendation</u>	<u>20</u>
<u>PROPOSAL NO. 5 — ADJOURNMENT OF ANNUAL MEETING</u>	<u>21</u>
<u>Vote Required</u>	<u>21</u>
<u>Board Recommendation</u>	<u>21</u>
<u>EXECUTIVE OFFICERS</u>	<u>22</u>
<u>CORPORATE GOVERNANCE</u>	<u>24</u>
<u>Corporate Governance Guidelines</u>	<u>24</u>
<u>Board Leadership Structure</u>	<u>24</u>
<u>Director Independence</u>	<u>25</u>
<u>Board Committees</u>	<u>25</u>
<u>Audit Committee</u>	<u>25</u>
<u>Compensation Committee</u>	<u>26</u>
<u>Compensation Consultants</u>	<u>27</u>
<u>Nominating and Corporate Governance Committee</u>	<u>27</u>
<u>Board and Board Committee Meetings and Attendance</u>	<u>27</u>
<u>Executive Sessions</u>	<u>28</u>
<u>Director Attendance at Annual Meeting of Stockholders</u>	<u>28</u>
<u>Director Nominations Process</u>	<u>28</u>
<u>Board Role in Risk Oversight</u>	<u>29</u>
<u>Committee Charters and Corporate Governance Guidelines</u>	<u>29</u>
<u>Code of Business Conduct and Ethics</u>	<u>29</u>
<u>Insider Trading Policy</u>	<u>30</u>
<u>Timing of Equity Awards</u>	<u>30</u>
<u>Compensation Recovery Policy (Clawback Policy)</u>	<u>30</u>
<u>Interested Persons' Communications with the Board</u>	<u>30</u>
<u>EXECUTIVE COMPENSATION</u>	<u>31</u>
<u>Summary Compensation Table</u>	<u>31</u>
<u>Narrative to Summary Compensation Table</u>	<u>31</u>

	<u>Page</u>
<u>Outstanding Equity Awards at Year End</u>	<u>33</u>
<u>Employment Arrangements</u>	<u>34</u>
<u>PAY VERSUS PERFORMANCE DISCLOSURE</u>	<u>36</u>
<u>DIRECTOR COMPENSATION</u>	<u>39</u>
<u>Director Compensation Table</u>	<u>39</u>
<u>EQUITY COMPENSATION PLAN INFORMATION</u>	<u>41</u>
<u>STOCK OWNERSHIP</u>	<u>42</u>
<u>Security Ownership of Certain Beneficial Owners and Management</u>	<u>42</u>
<u>Delinquent Section 16(a) Reports</u>	<u>43</u>
<u>CERTAIN TRANSACTIONS WITH RELATED PERSONS</u>	<u>44</u>
<u>Policies and Procedures on Transactions with Related Persons</u>	<u>44</u>
<u>March 2024 Registered Direct Offering</u>	<u>44</u>
<u>November 2024 Offering</u>	<u>44</u>
<u>BioXcel LLC</u>	<u>45</u>
<u>Amended and Restated Asset Contribution Agreement with BioXcel LLC</u>	<u>45</u>
<u>Amended and Restated Separation and Shared Services Agreement</u>	<u>45</u>
<u>InveniAI</u>	
<u>Director and Officer Indemnification and Insurance</u>	<u>46</u>
<u>STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS</u>	<u>47</u>
<u>HOUSEHOLDING</u>	<u>48</u>
<u>2024 ANNUAL REPORT</u>	<u>49</u>



BioXcel Therapeutics, Inc.
 555 Long Wharf Drive
 New Haven, CT 06511

**PROXY STATEMENT
 FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON DECEMBER 12, 2025**

This proxy statement (the “Proxy Statement”) and our annual report for the fiscal year ended December 31, 2024 (the “Annual Report”) and, together with the Proxy Statement, the “proxy materials”) are being furnished by and on behalf of the board of directors (the “Board”) of BioXcel Therapeutics, Inc. (the “Company,” “BTAI,” “we,” “us,” or “our”), in connection with our 2025 annual meeting of stockholders (the “Annual Meeting”). We will commence mailing this proxy statement and form of proxy card to all stockholders of record entitled to notice of, and to vote at, the Annual Meeting, on or about November 12, 2025.

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

When and where will the Annual Meeting be held?

The Annual Meeting will be held on Friday, December 12, 2025 at 9:00 a.m., Eastern Time. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast. You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/BTAI2025 and entering your 16-digit control number that appears on your proxy card, on your proxy card or on the instructions that accompanied your proxy materials. If you lose your 16-digit control number, you may join the Annual Meeting as a “Guest” but you will not be able to vote, ask questions or access the list of stockholders as of the close of business on October 31, 2025 (the “Record Date”).

What are the purposes of the Annual Meeting?

The purpose of the Annual Meeting is to vote on the following items described in this Proxy Statement:

1. Proposal No. 1: Election of the director nominees listed in this Proxy Statement;
2. Proposal No. 2: Ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2025;
3. Proposal No. 3: Approval, on an advisory (non-binding) basis, of the compensation of our named executive officers (“Say-on-Pay Vote”);
4. Proposal No. 4: Approve of an amendment to our Amended and Restated Certificate of Incorporation, as amended (“Certificate of Incorporation”) to effect, within 12 months following the date of stockholder approval and solely if the Board determines it is necessary and advisable to regain* compliance with the minimum bid price requirements of the Nasdaq Capital Market, a reverse stock split at a ratio of not less than 1-for-2 and not greater than 1-for-20, with the exact ratio to be set within that range by the Board (the “Reverse Stock Split Proposal”);
5. Proposal No. 5: Authorization of one or more adjournments of the Annual Meeting to solicit additional proxies in the event there are insufficient votes to approve Proposal 4 described above (the “Adjournment Proposal”).

* *The Company is currently in compliance with the minimum bid price requirements of the Nasdaq Capital Market and is submitting this proposal as a precautionary measure to provide additional flexibility to address any potential future deficiency with respect to the Nasdaq minimum bid price requirements.*

Are there any matters to be voted on at the Annual Meeting that are not included in this Proxy Statement?

As of the date of this Proxy Statement, we do not know of any matters to be properly presented at the Annual Meeting other than those referred to in this Proxy Statement. If other matters are properly presented at the meeting or any adjournment or postponement thereof for consideration, and you are a stockholder of record and have submitted a proxy card, the persons named in your proxy card will have the discretion to vote on those matters for you.

Who is entitled to vote at the Annual Meeting?

Holders of record of shares of our common stock as of the close of business on the Record Date will be entitled to notice of and to vote at the Annual Meeting and any continuation, postponement or adjournment thereof. At the close of business on the Record Date, there were 21,765,678 shares of our common stock issued and outstanding and entitled to vote. Each share of our common stock is entitled to one vote on any matter presented to stockholders at the Annual Meeting. You will need to obtain your own Internet access if you choose to attend the Annual Meeting online and/or vote over the Internet.

To attend and participate in the Annual Meeting, you will need the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. If your shares are held in “street name,” you should have received a voting instruction form provided by your bank, brokerage firm or other nominee rather than from us. If you do not have your 16-digit control number and attend the meeting online, you will be able to listen to the meeting only — you will not be able to vote or submit questions during the meeting. The meeting webcast will begin promptly at 9:00 a.m., Eastern Time. We encourage you to access the meeting prior to the start time. Online check-in will begin at 8:45 a.m., Eastern Time, and you should allow ample time for the check-in procedures.

What is the difference between being a “record holder” and holding shares in “street name”?

A record holder (also called a “registered holder”) holds shares in his or her name. Shares held in “street name” means that shares are held in the name of a bank, broker or other nominee on the holder’s behalf.

What do I do if my shares are held in “street name”?

If your shares are held in a brokerage account or by a bank or other holder of record, you are considered the “beneficial owner” of shares held in “street name.” The proxy materials should have been forwarded to you by your broker, bank or other nominee who is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your broker, bank or other holder of record on how to vote your shares by following their instructions for voting. Please refer to information from your bank, broker or other nominee on how to submit your voting instructions.

How many shares must be present to hold the Annual Meeting?

A quorum must be present at the Annual Meeting for any business to be conducted. The holders of at least one-third of the voting power of the Company’s capital stock issued and outstanding and entitled to vote, present in person, or by remote communication, or represented by proxy constitutes a quorum. If you sign and return your paper proxy card or authorize a proxy to vote electronically or telephonically, your shares will be counted to determine whether we have a quorum even if you abstain or fail to vote as indicated in the proxy materials.

Broker non-votes will also be considered present for the purpose of determining whether there is a quorum for the Annual Meeting.

What are “broker non-votes”?

A “broker non-vote” occurs when shares held by a broker in “street name” for a beneficial owner are not voted with respect to a proposal because (1) the broker has not received voting instructions from the stockholder who beneficially owns the shares and (2) the broker lacks the authority to vote the shares at their discretion.

Under current stock market rules that govern broker non-votes, Proposals No. 1, 3, 4 and 5 are each considered a “non-routine” matter, and a broker will, therefore, lack the authority to vote uninstructed shares at their discretion on such proposal. Proposal No. 2 is considered a “routine” matter, and a broker will, therefore, be permitted to exercise its discretion to vote uninstructed shares on such proposal.

What if a quorum is not present at the Annual Meeting?

If a quorum is not present or represented at the scheduled time of the Annual Meeting, (i) the chairperson of the Annual Meeting or (ii) a majority in voting power of the stockholders entitled to vote at the Annual Meeting, present electronically or represented by proxy, may adjourn the Annual Meeting until a quorum is present or represented.

How do I vote my shares without attending the Annual Meeting?

We recommend that stockholders vote by proxy even if they plan to attend the Annual Meeting and vote electronically. If you are a stockholder of record, there are three ways to vote by proxy:

- by Telephone — You can vote by telephone by calling 1-800-690-6903 and following the instructions on the proxy card;
- by Internet — You can vote over the Internet at www.proxyvote.com by following the instructions on the proxy card; or
- by Mail — You can vote by mail by signing, dating and mailing the proxy card, which you should have received by mail.

Telephone and Internet voting facilities for stockholders of record will be available 24 hours a day and will close at 11:59 p.m., Eastern Time, on December 11, 2025.

If your shares are held in the name of a bank, broker or other holder of record, you should have received instructions on how to vote from the bank, broker or holder of record. You must follow the instructions of such bank, broker or holder of record in order for your shares to be voted.

How can I attend and vote at the Annual Meeting?

We will be hosting the Annual Meeting live via audio webcast. Any stockholder can attend the Annual Meeting live online at www.virtualshareholdermeeting.com/BTAI2025. If you were a stockholder as of the Record Date, or you hold a valid proxy for the Annual Meeting, you can vote at the Annual Meeting. A summary of the information you need to attend the Annual Meeting online is provided below:

- Instructions on how to attend and participate via the Internet, including how to demonstrate proof of stock ownership, are posted at www.virtualshareholdermeeting.com/BTAI2025.
- Assistance with questions regarding how to attend and participate via the Internet will be provided at www.virtualshareholdermeeting.com/BTAI2025 on the day of the Annual Meeting.
- Webcast starts at 9:00 a.m., Eastern Time.
- You will need your 16-Digit Control Number to enter the Annual Meeting.
- Stockholders may submit questions while attending the Annual Meeting via the Internet.

To attend and participate in the Annual Meeting, you will need the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. If your shares are held in “street name,” you should have received a voting instruction form provided by your bank, brokerage firm or other nominee rather than from us. If you do not have your 16-digit control number and attend the meeting online, you will be able to listen to the meeting only — you will not be able to vote or submit questions during the meeting.

What if during the check-in time or during the Annual Meeting I have technical difficulties or trouble accessing the virtual meeting website?

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual meeting website. If you encounter any difficulties accessing the virtual meeting website during the check-in or meeting time, please call the technical support number that will be posted on the Annual Meeting login page.

How does the Board recommend that I vote?

The Board recommends that you vote:

1. FOR the nominees to the Board set forth in this Proxy Statement.
2. FOR the ratification of the appointment of Ernst & Young, LLP as our independent registered public accounting firm for 2025.
3. FOR the approval of the Say-on-Pay Vote.
4. FOR the approval of the Reverse Stock Split Proposal.
5. FOR the approval of the Adjournment Proposal.

How many votes are required to approve each proposal?

The table below summarizes the proposals that will be voted on, the vote required to approve each item and how votes are counted:

Proposal	Votes Required	Voting Options	Impact of "Withhold" or "Abstain" Votes	Broker Discretionary Voting Allowed
Proposal No. 1: Election of Directors	The plurality of the votes cast by the stockholders present in person or represented by proxy at the meeting and entitled to vote thereon. This means that the three nominees receiving the highest number of affirmative "FOR" votes will be elected as Class I directors.	"FOR ALL" "WITHHOLD ALL" "FOR ALL EXCEPT"	None ⁽¹⁾	No
Proposal No. 2: Ratification of Appointment of Independent Registered Public Accounting Firm	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively on this proposal at the Annual Meeting by the holders entitled to vote thereon.	"FOR" "AGAINST" "ABSTAIN"	None ⁽²⁾	Yes ⁽⁴⁾
Proposal No. 3: Approval of Say-on-Pay	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively on this proposal at the Annual Meeting by the holders entitled to vote thereon.	"FOR" "AGAINST" "ABSTAIN"	None ⁽²⁾	No ⁽³⁾
Proposal No. 4: Approval of the Reverse Stock Split Proposal	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively on this proposal at the Annual Meeting by the holders entitled to vote thereon.	"FOR" "AGAINST" "ABSTAIN"	None ⁽²⁾	No ⁽³⁾

<u>Proposal</u>	<u>Votes Required</u>	<u>Voting Options</u>	<u>Impact of “Withhold” or “Abstain” Votes</u>	<u>Broker Discretionary Voting Allowed</u>
Proposal No. 5: Approval of the Adjournment Proposal	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively on this proposal at the Annual Meeting by the holders entitled to vote thereon.	“FOR” “AGAINST” “ABSTAIN”	None ⁽²⁾	No ⁽³⁾

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- (1) Votes that are “withheld” will have the same effect as an abstention and will not count as a vote “FOR” or “AGAINST” a director, because directors are elected by plurality voting.
- (2) A vote marked as an “Abstention” or a broker non-vote is not considered a vote cast and will, therefore, not affect the outcome of this proposal.
- (3) As this proposal is considered a “non-routine” matter, brokers lack authority to exercise their discretion to vote uninstructed shares on this proposal.
- (4) As this proposal is considered a “routine” matter, brokers are permitted to exercise their discretion to vote uninstructed shares on this proposal, and we do not expect any broker non-votes on this proposal.

What if I do not specify how my shares are to be voted?

If you submit a proxy but do not indicate any voting instructions, the persons named as proxies will vote in accordance with the recommendations of the Board. The Board’s recommendations are set forth above, as well as with the description of each proposal in this Proxy Statement.

Who will count the votes?

Representatives of Broadridge Investor Communications Services (“Broadridge”) will tabulate the votes, and a representative of Broadridge will act as inspector of election.

Can I revoke or change my vote after I submit my proxy?

Yes. Whether you have voted by Internet, telephone or mail, if you are a stockholder of record, you may change your vote and revoke your proxy by:

- sending a written statement to that effect to the attention of our Corporate Secretary at our corporate offices, provided such statement is received no later than December 11, 2025;
- voting again by Internet or telephone at a later time before the closing of those voting facilities at 11:59 p.m., Eastern Time, on December 11, 2025;
- submitting a properly signed proxy card with a later date that is received no later than December 11, 2025; or
- attending the Annual Meeting, revoke your proxy and voting again.

If you hold shares in street name, you may submit new voting instructions by contacting your bank, broker or other nominee. You may also change your vote or revoke your proxy at the Annual Meeting if you obtain a signed proxy from the record holder (broker, bank or other nominee) giving you the right to vote the shares.

Your most recent proxy card or telephone or Internet proxy is the one that is counted. Your attendance at the Annual Meeting by itself will not revoke your proxy unless you give written notice of revocation to the Company before your proxy is voted or you vote at the Annual Meeting.

Who will pay for the cost of this proxy solicitation?

We will pay the cost of soliciting proxies. Proxies may be solicited on our behalf by directors, officers or employees (for no additional compensation) in person or by telephone, electronic transmission and facsimile

transmission. Brokers and other nominees will be requested to solicit proxies or authorizations from beneficial owners and will be reimbursed for their reasonable expenses.

Why hold a virtual meeting?

We want to provide expanded access, improved communication and cost savings for our stockholders and the Company while providing stockholders the same rights and opportunities to participate as they would have at an in-person meeting. We believe the virtual meeting format enables increased stockholder attendance and participation because stockholders can participate from any location around the world.

Will I be able to ask questions at the Annual Meeting?

As part of the Annual Meeting, we will hold a live Q&A session, during which we intend to answer appropriate questions submitted during the meeting and that relate to the matters to be voted on. We intend to reserve up to 10 minutes before the closing of the polls to address questions submitted. Only stockholders that have accessed the Annual Meeting as a stockholder (rather than a “Guest”) by following the procedures outlined above in “How can I attend and vote at the Annual Meeting?” will be able to submit questions during the Annual Meeting. Additionally, our Annual Meeting will follow “Rules of Conduct,” which will be available on our Annual Meeting webpage for stockholders that have accessed the Annual Meeting as a stockholder (rather than a “Guest”). Under these Rules of Conduct, a stockholder may ask up to two questions, and we will not address questions that are, among other things:

- irrelevant to the business of the Company or to the business of the Annual Meeting;
- related to the status or conduct of our clinical trials beyond that which is contained in our prior public disclosures;
- related to material non-public information of the Company;
- related to personal grievances;
- derogatory references to individuals or that are otherwise in bad taste;
- substantially repetitious of statements already made by another stockholder;
- in furtherance of the stockholder’s personal or business interests; or
- out of order or not otherwise suitable for the conduct of the Annual Meeting as determined by the Chair of the Annual Meeting or the Corporate Secretary in their reasonable judgment.

Additional information regarding the Q&A session will be available in the “Rules of Conduct” available on the Annual Meeting webpage for stockholders that have accessed the Annual Meeting as a stockholder (rather than a “Guest”) by following the procedures outlined above in “How can I attend and vote at the Annual Meeting?”

PROPOSAL NO. 1 — ELECTION OF DIRECTORS

Board Size and Structure

Our Amended and Restated Certificate of Incorporation, as amended, and as currently in effect (the “Certificate of Incorporation”) provides that the number of directors serving on our Board shall be established from time to time by our Board. Our Board has fixed the number of directors at eight, and we currently have eight directors serving on the Board.

Our Certificate of Incorporation provides that the Board be divided into three classes, designated as Class I, Class II and Class III. Each class must consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board. Each class of directors must stand for re-election no later than the third annual meeting of stockholders subsequent to their initial appointment or election to the Board, subject to the election and qualification of his or her successor and his or her earlier death, resignation, retirement, disqualification or removal. Except as otherwise required by law, any vacancies and newly created directorships resulting from an increase in the number of directors will be filled exclusively by a majority of the directors then in office, even if less than a quorum, and will hold office until the next stockholder’s meeting at which directors in his or her class are elected and his or her successor is elected and qualified or until his or her earlier death, resignation, retirement, disqualification or removal.

Current Directors and Terms

Our current directors and their respective classes and terms are set forth below.

Class I Director — Current Term Ending at 2025 Annual Meeting	Class II Director — Current Term Ending at 2026 Annual Meeting	Class III Director — Current Term Ending at 2027 Annual Meeting
June Bray	Michael Miller	Vimal Mehta, Ph.D.
Sandeep Laumas, M.D.	Michal Votruba, M.D.	Peter Mueller, Ph.D.
David Mack	Rajiv Patni, M.D.	

Nominees for Director

Ms. Bray, Dr. Laumas and Mr. Mack have been nominated by the Board to stand for election. Mr. Mack, as a director who was not previously elected by our stockholders, has been recommended by the non-management members of our Board as well as our Chief Executive Officer. As the directors assigned to Class I, Ms. Bray’s Dr. Laumas’s and Mr. Mack’s current terms of service will expire at the Annual Meeting. If elected by the stockholders at the Annual Meeting, Ms. Bray, Dr. Laumas and Mr. Mack will each serve for a term expiring at the annual meeting to be held in 2028 (the “2028 Annual Meeting”) and the election and qualification of his successor or until their earlier death, resignation, retirement, disqualification or removal.

Each person nominated for election has agreed to serve if elected, and management has no reason to believe that any nominee will be unable to serve. If, however, prior to the Annual Meeting, the Board should learn that any nominee will be unable to serve for any reason, the proxies that otherwise would have been voted for this nominee will be voted for a substitute nominee as selected by the Board. Alternatively, the proxies, at the Board’s discretion, may be voted for that fewer number of nominees as results from the inability of any nominee to serve. The Board has no reason to believe that any of the nominees will be unable to serve. Proxies cannot be voted for a greater number of persons than the number of nominees named in this proposal.

Information About Board Nominees and Continuing Directors

The following pages contain certain biographical information as of October 31, 2025 for each nominee for director and each director whose term as a director will continue after the Annual Meeting, including all positions he or she holds, his or her principal occupation and business experience for the past five years, and the names of other publicly-held companies of which the director or nominee currently serves as a director or has served as a director during the past five years.

We believe that all of our directors and nominees: display personal and professional integrity; satisfactory levels of education and/or business experience; broad-based business acumen; an appropriate level of understanding of our business and its industry and other industries relevant to our business; the ability and willingness to devote adequate time to the work of our Board and its committees; skills and personality that complement those of our other directors that helps build a board that is effective, collegial and responsive to the needs of our Company; strategic thinking and a willingness to share ideas; a diversity of experiences, expertise and background; and the ability to represent the interests of all of our stockholders. The information presented below regarding each nominee and continuing director also sets forth specific experience, qualifications, attributes and skills that led our Board to the conclusion that such individual should serve as a director in light of our business and structure.

Class I Directors Whose Terms Expire at the 2025 Annual Meeting

Class I Directors	Age	Served as Director Since	Current Positions with BTAI
June Bray	72	March 2021	Director
Sandeep Laumas, M.D.	57	September 2017	Director
David Mack	55	November 2024	Director

June Bray has served as a director of our Company since March 2021. She previously served as Senior Vice President, Global Regulatory Affairs and Medical Writing of Allergan, Inc., a pharmaceutical company, from 2008 to 2020, where she was in charge of global regulatory strategies for development projects and lifecycle management for all therapeutic areas. From 2006 to 2008, Ms. Bray was Vice President, Regulatory Affairs at Organon & Co. (prior to its merger with Merck & Co.), where she led departments responsible for regulatory activities for development and marketed products and, from 1980 to 2006, Ms. Bray served in various capacities at Berlex Laboratories, Inc., most recently as Vice President, Global Regulatory Affairs for Specialized Therapeutics/Oncology, a position she held from 2003 to 2006. Ms. Bray has served on the Board of Quince Therapeutics, Inc. since June 2022. Ms. Bray holds an M.B.A. from Fairleigh Dickinson University and a B.S. from the University of Rhode Island. We believe that Ms. Bray's extensive experience in developing global regulatory strategies for product candidates qualifies her to serve as a director of our Company.

Sandeep Laumas, M.D. has served as a director of our Company since September 2017. Dr. Laumas has served as the Chief Financial Officer and Chief Business Officer of Instil Bio, Inc. since February 2021 and June 2020, respectively. He began his career at Goldman Sachs & Co. in 1996 in the healthcare investment banking division before transitioning to the healthcare equity research division. He was an analyst at Balyasny Asset Management from 2001-03 and then a Managing Director of North Sound Capital from 2003-07, where he was responsible for the global healthcare investment portfolio. He founded and managed Bearing Circle Capital, an investment partnership, since 2008. Dr. Laumas has served as a member of the board of directors of Bioxccl Therapeutics Inc. since 2017 and a board member of Unicycive Therapeutics Inc. since 2018. He previously served as a board member of 9 Meters Biopharma, Inc. from 2020-21, its Executive Chairman from 2014-20, including its Chief Executive Officer from 2019-20. Dr. Laumas received his A.B. from Cornell University in 1990, his M.D. from Albany Medical College in 1995, with a research year at the Dana-Farber Cancer Institute and completed his medical internship at the Yale University School of Medicine in 1996.

Dr. Laumas has a novel industry perspective, particularly in both public and private investments and financial transactions in the healthcare arena, which we believe qualifies him to serve as a director of our Company.

David Mack has served as a director of our Company since November 2024. Mr. Mack has more than 25 years of experience as a lawyer, director, and investor and is currently a fiduciary at Drivetrain LLC, a fiduciary services company, a position he has held since 2018. He has extensive experience in leading transactions as well as deep knowledge of complex restructuring and litigation. He has previously served (or serves) on the boards of TerraForm Global, Inc. (NSDQ: GLBL), Speedcast International Limited (ASX: SDA) and Intelsat S.A., among others. He started his career in Sydney as a lawyer with Mallesons Stephen Jaques and then worked for Linklaters LLP in London. In 2000, he moved to the US, where he

worked at Simpson Thacher & Bartlett, LLP followed by Perry Capital LLC. He has a BA and an LLB (Hons) from the University of Sydney. We believe that Mr. Mack is qualified to serve as a director of our Company because of his extensive experience working on strategic transactions.

Class II Directors Whose Terms Expire at the 2026 Annual Meeting

Class II Directors	Age	Served as Director Since	Current Positions with BTAI
Michael Miller	68	June 2022	Director
Rajiv Patni, M.D.	57	January 2025	Director
Michal Votruba, M.D.	60	March 2019	Director

Michael Miller has served as a director of our Company since June 2022. Since May 2018, Mr. Miller has also served on the Board of Puma Biotechnology Inc., where he also serves on the Compensation and Nomination and Governance Committees. In addition, he has served as an advisor to several biopharmaceutical companies, including Concarlo Therapeutics since April 2022, Healthyr since Jan 2023, and Rigel Pharmaceuticals, Inc. since June 2022. Prior to that, he served as Executive Vice President, Commercial of Jazz Pharmaceuticals plc from March 2014 to August 2020. Mr. Miller received his B.S. from the University of San Francisco and his M.B.A. from San Francisco State University. We believe that Mr. Miller's extensive experience at commercial pharmaceutical and public companies provides valuable contributions to the Board.

Rajiv Patni, M.D., has served as a director of our Company since January 2025. Dr. Patni has served as the Chief Executive Officer of Judo Bio, a biopharmaceutical development company focused on pioneering oligonucleotide medicines delivered to the kidney, since September 2024. He previously served as Chief Research and Development Officer at Reata Pharmaceuticals, a commercial-stage company until it was acquired by Biogen in September 2023, and he is currently serving as a board member of Quince Therapeutics, Inc. (Nasdaq: QNCX). Previously, Dr. Patni also served as Chief Medical Officer at several public, commercial-stage biopharmaceutical companies — Global Blood Therapeutics, a biopharmaceutical company, from August 2020 to June 2023, Portola Pharmaceuticals from February 2020 to July 2020, and Adamas Pharmaceuticals from June 2015 to January 2020, until their acquisitions by larger companies. Earlier in his career, Dr. Patni held roles of increasing responsibility at Pfizer, Roche, and Actelion. Dr. Patni received his M.D. from the Icahn School of Medicine at Mount Sinai in New York City as part of an accelerated B.S./M.D. program. He completed an internal medicine residency and adult cardiology fellowship at the Albert Einstein College of Medicine, also in New York City, where he continued as an attending physician-scientist before joining the biopharmaceutical industry. We believe that Dr. Patni's extensive experience in biopharmaceutical product development provides valuable expertise to the Board.

Michal Votruba, M.D., has served as a director of our Company since March 2019. Since 2013, Dr. Votruba has been a Director of the Gradus/RSJ Life Sciences Fund, the largest dedicated fund in Central Europe with a portfolio of companies in Europe and the United States. Dr. Votruba served as a director of Mynd Analytics, Inc., a telebehavioral health services company, from July 2015 to 2019, and served as a director of Telemetry, Inc., successor to Mynd Analytics, since 2019. Since 2010, he has served as a member of the board of PrimeCell Therapeutics as the Director of Global Business Development overseeing the expansion of the largest regenerative medicine company operating in Central Europe. In 2009, the Czech Academy of Sciences solicited Dr. Votruba's expertise for the first successful privatization project of the Institute of Experimental Medicine in Prague: the newly created protocol established a precedent for future privatization projects in the Czech Republic. Dr. Votruba earned his M.D. from the Medical Faculty of Charles University in Prague in 1989. Shortly thereafter, he emigrated from Czechoslovakia and developed his professional career in Canada and the USA. Since 2005, Dr. Votruba combined his theoretical and clinical experience in the field of Competitive Intelligence serving the global pharmaceutical industry for eight years as an industry analyst advising senior leaders of companies including Amgen, Novartis, Eli Lilly, Allergan, EMD, Serono and Sanofi. Dr. Votruba brings valuable expertise to the Board as a clinical psychiatrist and broad experience in the international marketing of innovative medical technologies, which we believe qualifies him to serve as a director of our Company.

Class III Director Nominees for Election to Three Year Terms Expiring at the 2027 Annual Meeting

<u>Class III Directors</u>	<u>Age</u>	<u>Served as Director Since</u>	<u>Current Positions with BTAI</u>
Vimal Mehta, Ph.D.	64	April 2017	Chief Executive Officer, President, and Director
Peter Mueller, Ph.D.	69	April 2017	Chairman of the Board

Vimal Mehta, Ph.D. co-founded the Company and has served as a member of our Board since April 2017 and as our Chief Executive Officer and President since May 2017. Dr. Mehta also served as our Corporate Secretary from May 2017 to February 2021. He is also the co-founder and Chief Executive Officer of BioXcel Corporation (now BioXcel LLC). Dr. Mehta holds a Ph.D. in Chemistry from the University of Delhi, India and completed a Post-Doctoral Fellowship in Chemistry at the University of Montpellier, France. During the length of his career, Dr. Mehta has garnered a deep understanding of the biopharma and healthcare ecosystem and has been actively involved in diverse global value generating initiatives encompassing corporate strategy and planning, global business development, and corporate fundraising. As our co-founder, he has helped shape our strategic and business trajectory which the Board believes qualifies him to serve as a director of our Company.

Peter Mueller, Ph.D. has served as a director of our Company since April 2017 and Chairman of the Board since August 2017. With over 30 years of global pharma and biotech experience, Dr. Mueller is currently the President of the Mueller Health Foundation, a private foundation tackling globally lethal infectious diseases such as tuberculosis by addressing latency and the ever-growing challenges of antimicrobial resistance. From 2014 to 2016, he was President of R&D and Chief Scientific Officer of Axcella Health, a biotechnology company. From 2003 to 2014, Dr. Mueller served as Executive Vice President Global Research and Development & Chief Scientific Officer for Vertex Pharmaceuticals, Incorporated, a biotechnology company. He was involved in the development of Incivek (2011), Kalydeco (2012), and Orkambi (2014). Prior to his tenure at Vertex, he served as Senior Vice President, Research and Development, for Boehringer Ingelheim Pharmaceuticals, Inc. overseeing global research programs (immunology, inflammation, cardiovascular diseases and gene therapy) and the development of all drug candidates of the company's worldwide portfolio in North and South America, Canada and Japan, beginning in 1997. He was involved in the development of Spiriva, Combivent, Atrovent and Viramune. Dr. Mueller received both an undergraduate degree and a Ph.D. in Chemistry at the Albert Einstein University of Ulm, Germany, where he also holds a Professorship in Theoretical Organic Chemistry. He completed fellowships in Quantum Pharmacology at Oxford University and in Biophysics at Rochester University. He is a member of various scientific and political societies and currently serves on the Board of the US-India Chamber of Commerce Biotech. He also serves as chairman of the Scientific Advisory Board of BioXcel LLC and is an advisor to the University of Iowa Center for Bioanalysis and Bioprocessing. We believe that Dr. Mueller's extensive experience in the life sciences industry as a scientist and executive qualifies him to serve as a director of our Company.

Board Recommendation

The Board unanimously recommends a vote "**FOR**" the election of June Bray, Sandeep Laumas, M.D. and David Mack as Class I directors to hold office until the 2028 Annual Meeting and until their respective successors have been duly elected and qualified.

PROPOSAL NO. 2 — RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Appointment of Independent Registered Public Accounting Firm

The audit committee appoints our independent registered public accounting firm. In this regard, the audit committee evaluates the qualifications, performance and independence of our independent registered public accounting firm and determines whether to re-engage our current firm. As part of its evaluation, the audit committee considers, among other factors, the quality and efficiency of the services provided by the firm, including the performance, technical expertise, industry knowledge and experience of the lead audit partner and the audit team assigned to our account; the overall strength and reputation of the firm; the firm's global capabilities relative to our business; and the firm's knowledge of our operations. Ernst & Young LLP has served as our independent registered public accounting firm since March 2021. Neither the accounting firm nor any of its members has any direct or indirect financial interest in or any connection with us in any capacity other than as our auditors and providing audit and permissible non-audit related services. Upon consideration of these and other factors, the audit committee has appointed Ernst & Young LLP to serve as our independent registered public accounting firm for the year ending December 31, 2025.

Although ratification is not required by our bylaws or otherwise, the Board is submitting the selection of Ernst & Young LLP to our stockholders for ratification because we value our stockholders' views on the Company's independent registered public accounting firm and it is a good corporate governance practice. If our stockholders do not ratify the selection, it will be considered as notice to the Board and the audit committee to consider the selection of a different firm. Even if the selection is ratified, the audit committee, in its discretion, may select a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and its stockholders.

A representative of Ernst & Young LLP is expected to attend the Annual Meeting and to have an opportunity to make a statement and be available to respond to appropriate questions from stockholders.

Audit, Audit-Related, Tax and All Other Fees

The table below sets forth the aggregate fees billed to us for services related to the fiscal year ended December 31, 2024 and 2023 by Ernst & Young LLP.

	Year Ended December 31,	
	2024	2023
Audit Fees ⁽¹⁾	\$946,270	\$903,500
Audit-Related Fees ⁽²⁾	—	16,000
Tax Fees	—	—
All Other Fees	—	—
Total	\$946,270	\$919,500

(1) Audit fees consisted of audit services performed in connection with the audit of the Company's consolidated financial statements, the reviews of the Company's interim condensed consolidated financial statements, and related services that are normally provided in connection with registration statements. Included in the 2024 and 2023 audit fees are \$155,000 and \$105,000, respectively, billed in connection with our follow-on offerings. 2024 and 2023 audit fees also include fees related to the audit and review of the registration statements of the Company's subsidiary, OnkosXcel Therapeutics LLC, of \$0 and \$65,000, respectively.

(2) Audit-related fees consisted of out-of-pocket costs for the annual audit.

Pre-Approval Policies and Procedures

Consistent with SEC policies and guidelines regarding audit independence, the audit committee is responsible for the pre-approval of all audit and permissible non-audit services provided by our independent registered public accounting firm on a case-by-case basis. Our audit committee has established a policy regarding approval of all audit and permissible non-audit services provided by our principal accountants. No non-audit services were performed by our independent registered public accounting firm during the years

ended December 31, 2024 and 2023. Our audit committee pre-approves these services by category and service. Our audit committee has pre-approved all of the above-described services.

Board Recommendation

The Board unanimously recommends a vote “**FOR**” the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2025.

Audit Committee Report

The audit committee operates pursuant to a charter which is reviewed annually by the audit committee.

Additionally, a brief description of the primary responsibilities of the audit committee is included in this Proxy Statement under the discussion of “Corporate Governance — Audit Committee.” Under the audit committee charter, management is responsible for the preparation, presentation and integrity of the Company’s financial statements, for the appropriateness of accounting principles and financial reporting policies and for establishing and maintaining our internal control over financial reporting. The independent registered public accounting firm is responsible for auditing our financial statements and expressing an opinion as to their conformity with accounting principles generally accepted in the United States.

In the performance of its oversight function, the audit committee reviewed and discussed with management and Ernst & Young LLP, as the Company’s independent registered public accounting firm for the fiscal year ended December 31, 2024, the Company’s audited financial statements for the fiscal year ended December 31, 2024. The audit committee also discussed with the Company’s independent registered public accounting firm the matters required to be discussed by applicable requirements of the Public Company Accounting Oversight Board (the “PCAOB”) and the SEC. In addition, the audit committee received and reviewed the written disclosures and the letter from the Company’s independent registered public accounting firm required by applicable requirements of the PCAOB, regarding such independent registered public accounting firm’s communications with the audit committee concerning independence, and discussed with the Company’s independent registered public accounting firm their independence from the Company.

Based upon the review and discussions described in the preceding paragraph, the audit committee recommended to the Board that the Company’s audited financial statements be included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2024 filed with the SEC.

Submitted by the Audit Committee of the Company’s Board:

Sandeep Laumas, M.D. (Chair)
Michael Miller
Peter Mueller, Ph.D.
Michal Votruba, M.D.

**PROPOSAL NO. 3 — APPROVAL, ON AN ADVISORY (NON-BINDING) BASIS, OF THE
COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS**

In accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) and Rule 14a-21 under the Exchange Act, we request that our stockholders cast a non-binding, advisory vote to approve the compensation of our named executive officers identified in the section titled “Executive Compensation” set forth below in this proxy statement. This proposal, commonly known as a “say-on-pay” proposal, gives our stockholders the opportunity to express their views on our named executive officers’ compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement.

Accordingly, we ask our stockholders to vote “FOR” the following resolution at the Annual Meeting:

“RESOLVED, that the Company’s stockholders approve, by a non-binding advisory vote, the compensation of the named executive officers, as disclosed in the Company’s Proxy Statement for the 2025 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation tables and narrative discussion.”

We believe that our compensation programs and policies for the year ended December 31, 2024 were an effective incentive for the achievement of our goals, aligned with stockholders’ interest and worthy of stockholder support. Additional details concerning our compensation program are provided in the section titled “Executive Compensation” set forth below in this proxy statement.

This vote is merely advisory and will not be binding upon us, our Board or the Compensation Committee, nor will it create or imply any change in the duties of us, our Board or our Compensation Committee. The Compensation Committee will, however, take into account the outcome of the vote when considering future executive compensation decisions. The Board values constructive dialogue on executive compensation and other significant governance topics with our stockholders and encourages all stockholders to vote their shares on this important matter. Pursuant to the Board’s determination after considering the advisory vote on the frequency of future advisory votes on executive compensation in 2024, the next “say-on-pay” advisory vote following this one will occur at the 2026 annual meeting of stockholders.

Board Recommendation

The Board unanimously recommends a vote “FOR” the approval, on an advisory (non-binding) basis, of the compensation of our named executive officers.

**PROPOSAL 4—APPROVAL OF A PROPOSED AMENDMENT TO OUR AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION, AS AMENDED, TO EFFECT A REVERSE SPLIT OF OUR
OUTSTANDING COMMON STOCK IF DETERMINED NECESSARY BY OUR BOARD**

General

The Board has unanimously approved, subject to stockholder approval, an amendment to the Company’s Certificate of Incorporation to effect a reverse stock split of our common stock by a ratio of not less than 1-for-2 and not more than 1-for-10 at any time within 12 months following the date of stockholder approval, with the exact ratio to be set within this range by our Board (the “Reverse Stock Split”), on the condition that such potential Reverse Stock Split will only be effected if the Board deems the Reverse Stock Split necessary and advisable in order for the Company to regain compliance with Nasdaq Minimum Bid Price Requirements, which are described below. Although the Company is currently in compliance with the Nasdaq Minimum Bid Price Requirement, the Company has in the past failed to comply with this requirement. As described further below, obtaining stockholder approval for the potential Reverse Stock Split now will provide the Board with flexibility to address any potential future Nasdaq Minimum Bid Price Requirement deficiency without the delay and expense of calling a special meeting of stockholders to seek such approval.

A form of the certificate of amendment to the Certificate of Incorporation for the reverse stock split (the “*Reverse Stock Split Certificate of Amendment*”) is attached hereto as Appendix A. The following discussion is qualified in its entirety by the full text of the Reverse Stock Split Certificate of Amendment, which is incorporated herein by reference.

The Board has recommended that the proposed Reverse Stock Split Certificate of Amendment to effect the reverse stock split be presented to the Company’s stockholders for approval. If the Reverse Stock Split Certificate of Amendment is approved by a majority of the Company’s stockholders, the Board will have discretion to determine, as it deems to be in the best interest of the Company’s stockholders, the specific ratio to be used within the range described above and the timing of the reverse stock split, which must occur any time prior to the first anniversary of its approval by the stockholders. The Board believes that stockholder approval of the range of reverse stock split ratios (as opposed to approval of a single reverse stock split ratio) provides the Board with maximum flexibility to achieve the purpose of a reverse stock split, as discussed below, if the Board further determines that effecting a reverse stock split is in the best interests of the Company and its stockholders.

The Board may, in its discretion, determine not to effect the reverse stock split if it determines, subsequent to obtaining stockholder approval, that such action is not in the best interests of the Company. By voting in favor of the reverse stock split, you are expressly authorizing the Board to determine not to proceed with, and abandon, the reverse stock split if it should so decide.

Reasons for the Reverse Stock Split

The Company’s Common Stock is quoted on the Nasdaq Capital Market under the symbol “BTAI”.

For the Common Stock to continue trading on the Nasdaq Capital Market (“*Nasdaq*”), the Company must continue to comply with various listing standards, including that our Common Stock maintain a minimum bid price of \$1.00 per share, as set forth in Nasdaq Listing Rule 5550(a)(2) (the “*Minimum Bid Price Requirement*”).

As of the date of this proxy, the company is in compliance with all continued listing requirements for the Nasdaq Capital Market.

The Company has in the past failed to comply with the Minimum Bid Price Requirement.

While the Company is currently in compliance with the Nasdaq Minimum Bid Price Requirement, there is no guarantee that the Common Stock bid price will continue to satisfy the Nasdaq Minimum Bid Price Requirements in the future. In order to preemptively prepare for the possibility that the Common Stock falls out of compliance with the Minimum Bid Price Requirement, the Board is asking the stockholders to grant it the authority, at its discretion, to effect a reverse stock split, in order to take the necessary steps to regain compliance if required. The Board further believes that the increased market price of our Common

Stock expected should the Company implement the reverse stock split may improve marketability and liquidity of our Common Stock and may encourage trading.

In evaluating whether or not to recommend that stockholders authorize the reverse stock split, in addition to the considerations described above, the Board took into account various negative factors associated with a reverse stock split. These factors include: the negative perception of reverse stock splits held by some investors, analysts, and other stock market participants; the fact that the stock price of some companies that have effected reverse stock splits has subsequently declined, with a corresponding decline in market capitalization; the adverse effect on liquidity that might be caused by a reduced number of shares outstanding; and the costs associated with implementing a reverse stock split. Conversely, we believe the benefit of quickly and efficiently effecting a reverse stock split if the Common Stock no longer satisfies the Nasdaq Minimum Bid Price Requirement to maintain the listing of the Company's Common Stock on Nasdaq is in the best interests of the Company and its stockholders. The Board believes that the delisting of the Company's Common Stock from Nasdaq would impair our ability to raise additional funds and result in lower prices and larger spreads in the bid and ask prices for the Company's Common Stock, among other things. See "*Certain Risk Factors Associated with the Reverse Stock Split or Nasdaq Delisting*" below for more information.

Determination of the Reverse Stock Split Ratio

Our Board only intends to implement the reverse stock split to the extent it believes necessary to maintain the Company's listing on Nasdaq. In determining the ratio to be used, the Board will consider various factors, including but not limited to:

- the potential impact and anticipated benefits to the Company and its stockholders;
- market conditions and existing and expected market price of the Company's Common Stock at such time;
- existing and expected marketability of the Common Stock;
- the number of shares that will be outstanding after the reverse stock split;
- the stockholders' equity at such time; and
- the trading volume of the Company's Common Stock at such time.

Impact of the Reverse Stock Split, if Implemented

The Company's Certificate of Incorporation currently authorizes the issuance of 200,000,000 shares of Common Stock. On October 31, 2025, the Company had: 21,765,678 shares of Common Stock issued and outstanding, 349,892 shares of Common Stock issuable upon the exercise of outstanding options, 3,179,258 shares of Common Stock issuable upon the exercise of outstanding warrants, 114,711 shares of Common stock issuable upon settlement of restricted stock units, and 144,976 shares of Common Stock reserved for future issuance under the Company's 2020 Incentive Award Plan and 2020 Employee Stock Purchase Plan.

As a matter of Delaware law, the implementation of a reverse stock split does not require a reduction in the total number of authorized shares. If the Company's stockholders adopt and approve the Reverse Stock Split Certificate of Amendment and the reverse stock split is implemented by the Company, the authorized number of shares of the Company's Common Stock would not be reduced by the reverse stock split ratio determined by the Board.

If approved and effected, the reverse stock split will automatically apply to all shares of the Company's Common Stock, and each stockholder will own a reduced number of shares of the Company's Common Stock. However, except for adjustments that may result from the treatment of fractional shares, as described below, or as a result of adjustments to the conversion prices of certain convertible securities, as described below, the reverse stock split will not affect any stockholder's percentage ownership or proportionate voting power.

Based on the Company's capitalization as of October 31, 2025, the principal effect of the reverse stock split (at a ratio between 1-for-2 and 1-for-20), not taking into account the treatment of fractional shares

described under “— *Procedure for Effecting the Reverse Stock Split — Treatment of Fractional Shares*” below, would be that:

- the number of shares of the Company’s Common Stock issued and outstanding would be reduced from 21,756,678 shares to between approximately 10,882,839 shares and 1,088,283 shares;
- the number of shares of the Company’s Common Stock issuable upon the exercise of outstanding stock options would be reduced from 349,892 to between approximately 174,946 shares and 17,494 shares (and the respective exercise prices of the options would increase by a factor equal to the inverse of the split ratio);
- the number of shares of the Company’s Common Stock issuable upon the exercise of outstanding warrants would be reduced from 3,179,258 to between approximately 1,589,629 shares and 158,962 shares (and the respective exercise prices of the warrants would increase by a factor equal to the inverse of the split ratio);
- the number of shares of the Company’s Common Stock issuable upon the settlement of outstanding restricted stock units would be reduced from 114,711 to between approximately 57,335 shares and 5,735 shares;
- the aggregate number of shares of the Company’s Common Stock reserved for issuance, in connection with future awards under the Company’s 2020 Incentive Award Plan and 2020 Employee Stock Purchase Plan would be reduced from 144,976 to between approximately 72,488 shares and 7,248 shares;
- the number of shares of the Company’s authorized Common Stock would remain unchanged at 200,000,000 shares;
- the 10,000,000 shares of the Company’s authorized preferred stock would remain unchanged; and
- the number of shares of the Company’s Common Stock that are authorized, but unissued and unreserved, would increase from 174,445,485 to between approximately 187,222,743 shares and 198,722,278 shares; and the par value of the Company’s Common Stock and preferred stock would remain unchanged at \$0.001 per share, and, as a result, the stated capital attributable to Common Stock on the Company’s balance sheet would be reduced proportionately based on the reverse stock split ratio, the additional paid-in capital account would be credited with the amount by which the stated capital is reduced, and the per-share net income or loss and net book value of the Company’s Common Stock would be restated because there would be fewer shares of Common Stock outstanding.

The following table contains approximate information relating to our Common Stock immediately following the reverse stock split under certain possible exchange ratios, based on share information as of October 31, 2025. All share numbers are rounded down to the nearest whole share but otherwise do not reflect the potential effect of rounding down for fractional shares that may result from the reverse stock split.

	<u>Pre-Reverse Split</u>	<u>1-for-2</u>	<u>1-for-10</u>	<u>1-for-20</u>
Number of authorized shares of Common Stock	200,000,000	200,000,000	200,000,000	200,000,000
Number of outstanding shares of Common Stock	21,756,678	10,882,839	2,176,567	1,088,283
Number of shares of Common Stock issuable upon exercise of outstanding stock options	349,892	174,946	34,989	17,494
Number of shares of Common Stock issuable upon exercise of outstanding warrants	3,179,258	1,589,629	327,925	158,962
Number of shares of Common Stock issuable upon settlement of outstanding restricted stock units	114,711	57,355	11,471	5,735
Number of shares of Common Stock reserved for issuance in connection with future awards under the Company’s 2020 Incentive Award Plan and 2020 Employee Stock Purchase Plan	144,976	72,488	14,497	7,248
Number of shares of Common Stock authorized, but unissued and unreserved	174,445,485	187,222,743	197,444,551	198,722,278

See also “*Certain Risk Factors Associated with the Reverse Stock Split or Nasdaq Delisting*” and “*— Procedure for Effecting the Reverse Stock Split — Treatment of Fractional Shares*” below for additional information regarding the potential impact of the reverse stock split.

Anti-Takeover and Dilutive Effects

The number of authorized shares of our Common Stock and preferred stock will not be reduced as a result of the reverse stock split. The Common Stock and preferred stock that is authorized but unissued provide the Board with flexibility to effect, among other transactions, public or private financings, acquisitions, stock dividends, stock splits and the granting of equity incentive awards. However, these authorized but unissued shares may also be used by the Board, consistent with and subject to its fiduciary duties, to deter future attempts to gain control of us or make such actions more expensive and less desirable. Following stock split, our Board would continue to have the authority to issue additional shares from time to time without further action by the stockholders except as may be required by applicable law or regulations. The Reverse Stock Split Certificate of Amendment is not being recommended in response to any specific effort of which we are aware to obtain control of us, nor does our Board have any present intent to use the authorized but unissued Common Stock or preferred stock to impede a takeover attempt.

The Company expects to require additional financing to fund its ongoing activities. Other than the foregoing, and except for the Company’s obligation to issue Common Stock upon the exercise of outstanding options and warrants, we have no specific plan, commitment, arrangement, understanding or agreement, either oral or written, regarding the issuance of Common Stock subsequent to the reverse stock split at this time.

Certain Risk Factors Associated with the Reverse Stock Split or Nasdaq Delisting

A reverse stock split may negatively impact the market for our Common Stock.

Factors such as our financial results, market conditions and the market perception of our business may adversely affect the market price of our Common Stock. As a result, there can be no assurance that the total market capitalization of our Common Stock after the proposed reverse stock split will be equal to or greater than the total market capitalization before the proposed reverse stock split or that the per share market price of our Common Stock following the reverse stock split will increase in proportion to the reduction in the number of shares of Common Stock outstanding before the reverse stock split. A decline in the market price of our Common Stock after the reverse stock split may result in a greater percentage decline than would occur in the absence of a reverse stock split, and the liquidity of our Common Stock could be adversely affected following such a reverse stock split.

In addition, the reverse stock split may increase the number of stockholders who own odd lots (less than 100 shares). Any stockholder who owns fewer than 200 to 2,000 shares of Common Stock, depending on the final ratio, prior to the reverse stock split will own fewer than 100 shares of Common Stock following the reverse stock split. Stockholders who hold odd lots typically experience an increase in the cost of selling their shares and may have greater difficulty in effecting sales. Furthermore, some stockholders may cease being stockholders of the Company following the reverse stock split. Any stockholder who owns fewer than 2 to 20 shares of Common Stock, depending on the final ratio, prior to the reverse stock split will own less than one share of Common Stock following the reverse stock split and therefore such stockholder will receive cash equal to the market value of such fractional share and cease being a stockholder of the Company, as further described below under “*— Procedure for Effecting the Reverse Stock Split — Treatment of Fractional Shares*”.

The market price of our Common Stock will also be based on our performance and other factors, including those factors listed under the heading “Risk Factors” and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2024 and our Quarterly Reports on Form 10-Q for the periods ended March 31, 2025, June 30, 2025 and September 30, 2025 and other reports that we file with the SEC. There can also be no assurance that the minimum bid price per share of our Common Stock will remain in excess of \$1.00 following the reverse stock split for a sustained period of time, if at all.

A reverse stock split would increase the Company's authorized but unissued shares of Common Stock, which could negatively impact a potential investor if they purchased shares of Common Stock.

Because the number of authorized shares of the Company's Common Stock will not be reduced proportionately, the reverse stock split will increase the Board's ability to issue authorized and unissued shares without further stockholder action. The issuance of additional shares of Common Stock or securities convertible into Common Stock may have a dilutive effect on earnings per share and relative voting power and may cause a decline in the trading price of the Common Stock. The Company could use the shares that are available for future issuance in dilutive equity financing transactions, or to oppose a hostile takeover attempt or delay or prevent changes in control or changes in or removal of management, including transactions that are favored by a majority of the stockholders or in which the stockholders might otherwise receive a premium for their shares over then-current market prices or benefit in some other manner.

The Company expects to require additional financing to fund its ongoing activities. Other than the foregoing, and except for the Company's obligation to issue Common Stock upon the exercise of outstanding options and warrants, the Company has no specific plan, commitment, arrangement, understanding or agreement, either oral or written, regarding the issuance of Common Stock subsequent to the reverse stock split at this time.

Procedure for Effecting the Reverse Stock Split

When and if the Board decides to implement the reverse stock split at any time before the first anniversary of its approval by the stockholders, the Company will promptly file the Reverse Stock Split Certificate of Amendment with the Secretary of State of the State of Delaware to amend its existing Certificate of Incorporation. The reverse stock split will become effective upon filing the Reverse Stock Split Certificate of Amendment with the Secretary of State of the State of Delaware or at a later date and time set forth therein, if any, which effective time is referred to as the "reverse stock split effective date". Beginning on the reverse stock split effective date, each certificate representing pre-reverse stock split shares will be deemed for all corporate purposes to evidence ownership of post-reverse stock split shares. The text of the Reverse Stock Split Certificate of Amendment is set forth in Appendix A to this proxy statement. The text of the Reverse Stock Split Certificate of Amendment is subject to modification to include such changes as may be required by the office of the Secretary of State of the State of Delaware and as the Board deems necessary and advisable to effect the reverse stock split, including the applicable ratio for the reverse stock split.

After the reverse stock split effective date, our Common Stock will have a new CUSIP number, which is a number used to identify securities, and stock certificates with the old CUSIP number will need to be exchanged for stock certificates with the new CUSIP number using the procedures described below.

Exchange of Stock Certificates

As soon as practicable after the effective date of the reverse stock split, stockholders holding certificated shares will be notified that the reverse stock split has been effected. Equiniti Trust Company LLC, the Company's transfer agent, will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-split shares in certificated form will be asked to surrender to the exchange agent certificates representing pre-split shares in exchange for certificates representing post-split shares in accordance with the procedures to be set forth in a letter of transmittal that will be delivered to the stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered to the exchange agent his, her or its outstanding certificate(s) together with the properly completed and executed letter of transmittal.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT THEIR STOCK CERTIFICATES UNTIL THEY RECEIVE A TRANSMITTAL FORM FROM THE EXCHANGE AGENT.

STOCKHOLDERS ARE ENCOURAGED TO PROMPTLY SURRENDER CERTIFICATES TO THE EXCHANGE AGENT FOLLOWING RECEIPT OF TRANSMITTAL FORMS IN ORDER TO AVOID HAVING SHARES POSSIBLY BECOMING SUBJECT TO ESCHEAT LAWS.

Stockholders whose shares are held by their stockbroker do not need to submit old share certificates for exchange. Their accounts will automatically reflect the new quantity of shares based on the selected reverse stock split ratio. Beginning on the reverse stock split effective date, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

Treatment of Fractional Shares

To avoid the existence of fractional shares of Common Stock after the reverse stock split, fractional shares that would be created as a result of the reverse stock split will be rounded down to the next whole share and the stockholder will receive cash equal to the market value of the fractional share, determined by multiplying such fraction by the closing sales price of the Company's Common Stock as reported on Nasdaq on the last trading day before the reverse stock split effective date (as adjusted to give effect to the reverse stock split). The ownership of a fractional share will not give the holder any voting, dividend or other right except to receive the cash payment therefor. If a stockholder is entitled to a cash payment in lieu of any fractional share, a check will be mailed to the stockholder's registered address as soon as practicable after the reverse stock split effective date. By signing and cashing the check, stockholders will warrant that they owned the shares of Common Stock for which they received such cash payment.

No Appraisal Rights

Under the Delaware General Corporation Law, our stockholders do not have a right to dissent and are not entitled to appraisal rights with respect to the proposed Reverse Stock Split Certificate of Amendment to effect the reverse stock split, and we will not independently provide our stockholders with any such rights.

Material Federal Income Tax Consequences

The following discussion of certain U.S. federal income tax consequences to the Company's stockholders of the reverse stock split, if effected, does not purport to be a complete discussion of all of the possible U.S. federal income tax consequences and is included for general information only. It not intended as tax advice to any person and is not a comprehensive description of the tax consequences that may be relevant to each stockholder's own particular circumstances. The discussion is based on the Internal Revenue Code of 1986, as amended (the "*Code*"), applicable Treasury Regulations promulgated thereunder, judicial authority and current administrative rulings and practices as in effect on the date of this proxy statement. Changes to the laws could alter the tax consequences described below, possibly with retroactive effect. The Company has not sought and will not seek an opinion of counsel or a ruling from the Internal Revenue Service regarding the U.S. federal income tax consequences of the reverse stock split.

This discussion addresses the U.S. federal income tax consequences only to a stockholder that is (i) a citizen or individual resident of the United States, (ii) a corporation organized in or under the laws of the United States or any state thereof or the District of Columbia or otherwise subject to U.S. federal income taxation on a net income basis in respect of our Common Stock, (iii) a trust if (1) a U.S. court is able to exercise primary supervision over administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in place to be treated as a U.S. person, or (iv) an estate whose income is subject to U.S. federal income taxation regardless of its source. This discussion addresses only those stockholders who hold their pre-reverse stock split shares as "capital assets" as defined in the Code (generally, property held for investment), and will hold the shares received in the reverse stock split as capital assets. Further, it does not address any state, local, foreign or other income tax consequences, nor does it address the tax consequences to stockholders that are subject to special tax rules, such as, without limitation, stockholders who are subject to the alternative minimum tax, banks, insurance companies, regulated investment companies, personal holding companies, stockholders who are not "United States persons" as defined in Section 7701(a)(30) of the Code, U.S. persons whose functional currency is not the U.S. dollar, broker-dealers, tax-exempt entities, or S corporations, partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (or investors therein). If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds pre-reverse stock split shares of the Company's stock, the U.S. federal income tax treatment of a partner of the partnership will depend on the status of the partner and the activities of the partnership and upon certain determinations

made at the partnership level. Partners in partnerships holding our Common Stock are urged to consult their own tax advisors about the U.S. federal income tax consequences of the reverse stock split.

Stockholders are advised to consult their own tax advisers regarding the U.S. federal income tax consequences of the reverse stock split in light of their personal circumstances and the consequences under state, local and foreign tax laws, and also as to any estate or gift tax considerations.

Exchange Pursuant to Reverse Stock Split

No gain or loss will be recognized by a stockholder upon such stockholder's exchange of pre-reverse stock split shares for post-reverse stock split shares pursuant to the reverse stock split, except to the extent of cash, if any, received in lieu of fractional shares, further described in "*Cash in Lieu of Fractional Shares*" below. The aggregate tax basis of the post-reverse stock split shares received in the reverse stock split, including any fractional share deemed to have been received, will be equal to the aggregate tax basis of the pre-reverse stock split shares exchanged therefor, and the holding period of the post-reverse stock split shares will include the holding period of the pre-reverse stock split shares.

Cash in Lieu of Fractional Shares

A stockholder who receives cash in lieu of a fractional post-reverse stock split share should generally be treated as having received such fractional share pursuant to the reverse stock split and then as having exchanged such fractional share for cash in a redemption of such fractional share. The amount of any gain or loss should be equal to the difference between the ratable portion of the tax basis of the pre-reverse stock split shares exchanged in the reverse stock split that is allocated to such fractional share and the cash received in lieu thereof. In general, any such gain or loss will constitute a long-term capital gain or loss if the stockholder's holding period for such pre-reverse stock split shares exceeds one year at the time of the reverse stock split. Deductibility of capital losses by holders is subject to limitations. Depending on a stockholder's individual facts and circumstances, it is possible that cash received in lieu of a fractional share could be treated as a distribution under Section 301 of the Code, so stockholders should consult their own tax advisors as to that possibility and the resulting tax consequences to them in that event.

The Company will not recognize any gain or loss as a result of the reverse stock split.

Vote Required

The affirmative vote of holders of a majority in voting power of the votes cast on this proposal at the Annual Meeting is required for the approval of the reverse stock split. Abstentions are not considered votes cast and will have no effect on the vote for this proposal.

Board Recommendation

The Board unanimously recommends a vote "**FOR**" the approval of the Reverse Stock Split Proposal.

PROPOSAL NO. 5—ADJOURNMENT OF ANNUAL MEETING

The Board has approved the submission to the stockholders of a proposal to approve one or more adjournments of the Annual Meeting in the event that there is not a sufficient number of votes at the Annual Meeting to approve Proposal 4. In order to permit proxies that have been timely received to be voted for such adjournments, we are submitting this proposal as a separate matter for your consideration. If it is necessary to adjourn the Annual Meeting, the adjournment is for a period of less than 30 days and the Record Date remains unchanged, no notice of the time and place of the reconvened meeting will be given to stockholders, other than an announcement made at the Annual Meeting.

Vote Required

The affirmative vote of holders of a majority of in voting power of the votes cast on this proposal at the Annual Meeting is required for the approval of this proposal. Abstentions are not considered votes cast and will have no effect on the vote for this proposal.

Board Recommendation

The Board unanimously recommends a vote “**FOR**” the approval of the Adjournment Proposal.

EXECUTIVE OFFICERS

The table below identifies and sets forth certain biographical and other information regarding our executive officers as of October 31, 2025. There are no family relationships among any of our executive officers or directors.

Executive Officer	Age	Position	In Current Position Since
Vimal Mehta	64	Chief Executive Officer and President, and Director	2017
Richard Steinhart	68	Senior Vice President and Chief Financial Officer	2018
Frank Yocca, Ph.D.	69	Senior Vice President and Chief Scientific Officer	2018
Javier Rodriguez	53	Senior Vice President, Chief Legal Officer and Corporate Secretary	2021

See page 12 of this Proxy Statement for Vimal Mehta's biography.

Richard I. Steinhart has served as our Senior Vice President and Chief Financial Officer since March 2018. From October 2017 to March 2018, Mr. Steinhart served as our Vice President and Chief Financial Officer. From October 2015 to June 2017, he was Vice President and CFO at Remedy Pharmaceuticals, Inc. From January 2014 to September 2015, Mr. Steinhart worked as a financial and strategic consultant to the biotechnology and medical device industries. From April 2006 through December 2013, Mr. Steinhart was employed by MELA Sciences, Inc., as their Vice President, Finance and Chief Financial Officer, Treasurer and Secretary from April 2006 to April 2012 and as Sr. Vice President, Finance and Chief Financial Officer from April 2012 to December 2013. From May 1992 until joining MELA Sciences, Mr. Steinhart was a Managing Director of Forest Street Capital/SAE Ventures, a boutique investment banking, venture capital, and management consulting firm focused on healthcare and technology companies. Prior to Forest Street Capital/SAE Ventures, he was Vice President and Chief Financial Officer of Emisphere Technologies, Inc. Mr. Steinhart's other experience includes seven years at CW Group, Inc., a venture capital firm focused on medical technology and biopharmaceutical companies, where he was a General Partner and Chief Financial Officer. Mr. Steinhart is a member of the board of directors of Actinium Pharmaceuticals, Inc., a position he assumed in November 2013, and Atossa Genetics, Inc., where he began his service in March 2014.

Mr. Steinhart serves as the Chairman of the Audit Committee at Actinium Pharmaceuticals, where he also sits on the Corporate Governance Committees. Mr. Steinhart serves as the Chairman of Atossa Genetics Audit Committee and is a member of its Audit Committee and Compensation Committee. He holds B.B.A. and M.B.A. degrees from Pace University and is a Certified Public Accountant (inactive).

Frank D. Yocca, Ph.D. has served as our Executive Vice President and Chief Scientific Officer since December 2023. From March 2018 to December 2023, he served as our Senior Vice President and Chief Medical Officer. From June 2017 to March 2018, Dr. Yocca served as our Vice President and Chief Scientific Officer. From April 2015 to April 2017, he was Senior Vice President, CNS R&D of BioXcel. From 2005 to 2015, Dr. Yocca held multiple leadership roles at AstraZeneca plc, including Vice President, Strategy and Externalization, Neuroscience Virtual Innovative Medicine Unit (iMed) (2011-2015), Vice President and Head, Strategy Unit, CNS and Pain Innovative Medicine Unit (iMed) (2010 to 2011) and Vice President and Head, CNS Pain Discovery (2005 to 2010). Prior to this, he was Executive Director at the Bristol Myers Squibb Pharmaceutical Research Institute from 1984 to 2004 where he served concurrent leadership responsibilities within the Neuroscience Clinical Group for Early and Late Clinical Development Studies. Prior to this, Dr. Yocca served as Executive Director, Neuroscience Discovery from 1997 to 2003, where he was a collaborator in the development and implementation of corporate strategic plans and leader for the Neuroscience Biology Department in the discovery of psychiatry and Alzheimer's clinical candidates. He was a core member of the Abilify Product Development and Commercialization Team from 1999 to 2002 and a core member of the Early and Late Discovery and Development Teams from 1984 to 2001. Dr. Yocca holds a B.S. in biochemistry from Manhattan College and an M.S. in pharmacology and a Ph.D. in neuropharmacology from St. John's University.

Javier Rodriguez has served as our Senior Vice President and Chief Legal Officer and Corporate Secretary since January 2021. Mr. Rodriguez has over 20 years of extensive strategic and legal experience within the

biopharmaceutical industry and has broad leadership experience managing legal, compliance, corporate governance, intellectual property, data privacy, and government affairs professionals. Prior to joining BioXcel Therapeutics, he was Chief Legal Officer at Indivior PLC (LSE: INDV), a global pharmaceuticals company with operations in over 40 countries, from December 2014 to December 2020, where he oversaw all legal affairs, data privacy compliance, and corporate governance matters. Before taking on his role at Indivior, Mr. Rodriguez was General Counsel at Reckitt Benckiser Pharmaceuticals Inc. where he played a key leadership role in negotiating and successfully effectuating the demerger and spin-off of the organization in 2014, which included closing a \$750 million secured term loan and \$50 million revolving credit facility to fund on-going operations of the demerged entity. Earlier in his career, Mr. Rodriguez held roles of increasing responsibility at Reckitt Benckiser LLC, Bayer Healthcare Pharmaceuticals, Inc. and Berlex, Inc. He began his legal career in 2000 as a litigation associate at Thelen Reid & Priest, LLP in New York City. He holds a B.S. in Civil Engineering from Rutgers University, a M.S.E. in Structural Engineering from the University of Michigan and a J.D. from the University of Pennsylvania.

CORPORATE GOVERNANCE

Corporate Governance Guidelines

Our Board has adopted Corporate Governance Guidelines. A copy of these Corporate Governance Guidelines can be found in the “Governance — Governance Documents” section of the “Investors” page of our website located at www.bioxceltherapeutics.com, or by writing to our Corporate Secretary at our offices at 555 Long Wharf Drive, New Haven, CT 06511. Among the topics addressed in our Corporate Governance Guidelines are:

- Board size, independence and qualifications
- Executive sessions of independent directors
- Board leadership structure
- Director qualifications and selection of new directors
- Director orientation and continuing education
- Limits on board service
- Change of principal occupation
- Term limits
- Director responsibilities
- Director compensation
- Stock ownership
- Conflicts of Interest
- Interaction with investors, the press and customers
- Board access to senior management
- Board access to independent advisors
- Board and committee self-evaluations
- Board meetings
- Director attendance
- Meeting materials
- Board committees, responsibilities and independence
- Succession planning
- Risk management

Board Leadership Structure

Our Corporate Governance Guidelines provide our Board with flexibility to combine or separate the positions of Chairperson of the Board and Chief Executive Officer in accordance with its determination that utilizing one or the other structure would be in the best interests of the Company and its stockholders. If the Chairperson of the Board is a member of management or does not otherwise qualify as independent, our Corporate Governance Guidelines provide for the appointment by the independent directors of a lead independent director (the “Lead Director”). The Lead Director’s responsibilities include, but are not limited to: presiding over all meetings of the Board at which the Chairperson of the Board is not present, including any executive sessions of the independent directors; approving Board meeting schedules and agendas; and acting as the liaison between the independent directors and the Chief Executive Officer and Chairperson of the Board. Our Corporate Governance Guidelines provide that, at such times as the Chairperson of the Board qualifies as independent, the Chairperson of the Board will serve as Lead Director.

The positions of our Chair of the Board and our Chief Executive Officer are currently served by two separate persons. Dr. Mueller serves as Chairman of the Board, and Dr. Mehta serves as our Chief Executive Officer. In his capacity as the independent Board Chair, Dr. Mueller performs the functions of the Lead Director.

The Board believes that our current leadership structure of Chief Executive Officer and Chair of the Board being held by two separate individuals is in the best interests of the Company and its stockholders and strikes the appropriate balance between the Chief Executive Officer and President’s responsibility for the strategic direction, day-to-day leadership and performance of our Company and the Chair of the Board’s responsibility to guide overall strategic direction of our Company and provide oversight of our corporate governance and guidance to our Chief Executive Officer and President and to set the agenda for and preside over Board meetings. We recognize that different leadership structures may be appropriate for companies in different situations and believe that no one structure is suitable for all companies. Accordingly, the Board will continue to periodically review our leadership structure and make such changes in the future as it deems appropriate and in the best interests of the Company and its stockholders.

Director Independence

Under our Corporate Governance Guidelines and Nasdaq rules, a director is independent if he or she does not have a material or other disqualifying relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities as a director. In addition, the director must meet the bright-line tests for independence set forth by the Nasdaq rules.

Our Board has undertaken a review of its composition, the composition of its committees and the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our Board has determined that none of Ms. Bray, Mr. Miller, Mr. Mack or Drs. Laumas, Mueller, Patni or Votruba, representing seven of our eight current directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors qualifies as “independent” as that term is defined under the Nasdaq rules. In making these determinations, our Board considered the relationships that each non-employee director has with us and all other facts and circumstances our Board deemed relevant in determining their independence, including the director’s beneficial ownership of our common stock and the relationships of our non-employee directors with certain of our significant stockholders.

Board Committees

The standing committees of our Board include: an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and the responsibilities described below. In addition, from time to time, special committees may be established under the direction of our Board when necessary to address specific issues. Each of the audit committee, the compensation committee and the nominating and corporate governance committee operates under a written charter which are available in the “Governance — Governance Documents” section of the “Investors” page of our website located at www.bioxceltherapeutics.com.

	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
June Bray	—	—	X
Sandeep Laumas, M.D.	Chair	X	X
Peter Mueller, Ph.D.	X	Chair	Chair
Michael Miller	X	—	—
Michal Votruba, M.D.	X	—	—
David Mack	—	X	—
Rajiv Patni	—	—	—

Audit Committee

Our audit committee is responsible for, among other things:

- appointing, approving the compensation of, and assessing the independence of, our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing our annual and quarterly financial statements and related disclosures with management and our independent registered public accounting firm;
- considering whether to recommend to the Board that the Company’s audited financial statements be included in the Company’s Annual Report on Form 10-K;

- coordinating our Board’s oversight of our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk assessment and risk management policies, and overseeing management of our financial risks, cybersecurity risks, information security risks, and, as necessary or advisable, such other material risks facing the Company;
- meeting independently with our internal auditors, if any, independent registered public accounting firm and management;
- reviewing on a periodic basis our investment policy;
- reviewing and approving or ratifying any related person transactions;
- pre-approving all audit and non-audit services provided to us by our independent auditor (other than those provided pursuant to appropriate preapproval policies established by the committee or exempt from such requirement under SEC rules);
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters, and for the confidential and anonymous submission by our employees of concerns regarding questionable accounting or auditing matters; and
- preparing the audit committee report required by SEC rules.

The current members of our audit committee are Peter Mueller, Sandeep Laumas, Michael Miller and Michal Votruba, with Dr. Laumas serving as chair. All members of our audit committee meet the requirements for financial literacy under the applicable Nasdaq rules and regulations. Our Board has affirmatively determined that each member of our audit committee qualifies as “independent” under Nasdaq’s additional standards applicable to audit committee members and Rule 10A-3 of the Exchange Act of 1934, as amended (the “Exchange Act”) applicable to audit committee members. In addition, our Board has determined that each of Dr. Laumas, Mr. Miller, Dr. Mueller, and Dr. Votruba qualifies as an “audit committee financial expert,” as such term is defined in Item 407(d)(5) of Regulation S-K.

Compensation Committee

Our compensation committee is responsible for, among other things:

- reviewing and approving, or recommending for approval by the Board, the compensation of our Chief Executive Officer and our other executive officers;
- reviewing and approving or make recommendations to the Board regarding the Company’s incentive compensation plans and equity-based plans and arrangements;
- overseeing and administering our incentive compensation and equity-based plans and arrangement;
- periodically reviewing and making recommendations to our Board with respect to director compensation;
- reviewing and discussing annually with management our “Compensation Discussion and Analysis,” to the extent required;
- preparing the annual compensation committee report required by SEC rules, to the extent required;
- reviewing and discussing the results of the most recent stockholder advisory vote on executive compensation, and reviewing and recommending to our Board for approval the frequency with which we should conduct such votes, to the extent required; and
- overseeing the Company’s programs and policies as may be applicable, regarding talent management (including retention, development and training) and diversity and inclusion.

The current members of our compensation committee are Peter Mueller, Ph.D., David Mack and Sandeep Laumas, M.D., with Dr. Mueller serving as chair. Our Board has determined that each member of our

compensation committee qualifies as “independent” under Nasdaq’s additional standards applicable to compensation committee members and is a “non-employee director” as defined in Section 16b-3 of the Exchange Act.

The compensation committee generally considers the Chief Executive Officer’s recommendations when making decisions regarding the compensation of non-employee directors and executive officers (other than the Chief Executive Officer). Pursuant to the compensation committee’s charter, the compensation committee has the authority to retain or obtain the advice of compensation consultants, legal counsel and other advisors to assist in carrying out its responsibilities. Before selecting any such consultant, counsel or advisor, the compensation committee reviews and considers the independence of such consultant, counsel or advisor in accordance with applicable Nasdaq rules. We must provide appropriate funding for payment of reasonable compensation to any advisor retained by the compensation committee.

Compensation Consultants

The compensation committee has the authority under its charter to retain outside consultants or advisors, as it deems necessary or advisable. In accordance with this authority, during fiscal 2024, the compensation committee engaged the services of Radford, a part of Aon plc (“Radford”), as its independent outside compensation consultants.

As requested by the compensation committee, in 2024, Radford’s services to the compensation committee included advising on the Company’s equity compensation programs and the development of the Company’s peer group and providing support and analysis regarding executive and director compensation.

All executive compensation services provided by Radford during 2024 were conducted under the direction or authority of the compensation committee, and all work performed by Radford was pre-approved by the compensation committee. Radford nor any of its affiliates maintains any other direct or indirect business relationships with us or any of our subsidiaries. The compensation committee considered whether any work provided by Radford raised any conflict of interest for services performed during 2024 and determined that it did not.

Additionally, during 2024, Radford did not provide any services to us other than regarding executive and director compensation and broad-based plans that do not discriminate in scope, terms, or operation, in favor of our executive officers or directors, and that are available generally to all salaried employees.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee is responsible for, among other things:

- identifying individuals qualified to become members of our Board;
- recommending to our Board the persons to be nominated for election as directors and to each committee of the Board;
- developing and recommending to our Board corporate governance guidelines, and reviewing and recommending to our Board proposed changes to our corporate governance guidelines from time to time;
- reviewing and making recommendations to the Board in connection with a director’s notification of a change in employment or other circumstances; and
- overseeing a periodic evaluation of our Board.

The current members of our nominating and corporate governance committee are June Bray, Sandeep Laumas and Peter Mueller, with Peter Mueller serving as chair. Our Board has determined that each of Ms. Bray and Drs. Laumas and Mueller qualifies as “independent” under applicable Nasdaq rules applicable to nominating and corporate governance committee members.

Board and Board Committee Meetings and Attendance

During fiscal 2024, our Board met 12 times, the audit committee met four times, the compensation committee met one time and the nominating and corporate governance committee met one time. In 2024, each of our

incumbent directors attended at least 75% of the meetings of the Board and committees on which he or she then served as a member.

Executive Sessions

Executive sessions, which are meetings of the non-management members of the Board, are regularly scheduled throughout the year. In addition, at least twice per year, the independent directors meet in a private session that excludes management and any non-independent directors. The Chair of the Board presides at each of these meetings and, in his absence, the non-management and independent directors in attendance, as applicable, determine which member will preside at such session.

Director Attendance at Annual Meeting of Stockholders

While do not have a formal policy regarding the attendance of our Board members at our annual meetings of stockholders, it is expected that directors will attend our annual meeting of stockholders. All of our directors attended our annual meeting of stockholders held in 2024.

Director Nominations Process

The nominating and corporate governance committee is responsible for recommending candidates to serve on the Board and its committees. In considering whether to recommend any particular candidate to serve on the Board or its committees or for inclusion in the Board's slate of recommended director nominees for election at the annual meeting of stockholders, the nominating and corporate governance committee considers the criteria set forth in our Corporate Governance Guidelines. Specifically, the nominating and corporate governance committee may take into account many factors, including personal and professional integrity; ethics and values; experience in corporate management, such as serving as an officer or former officer of a publicly held company; strong finance experience; relevant social policy concerns; experience relevant to the Company's industry; experience as a board member or executive officer of another publicly held company; relevant academic expertise or other proficiency in an area of the Company's operations; diversity of expertise and experience in substantive matters pertaining to the Company's business relative to other board members; diversity of background and perspective, including, but not limited to, practical and mature business judgment and the ability to make independent analytical inquiries; and any other relevant qualifications, attributes or skills.

The Board evaluates each individual in the context of the Board as a whole, with the objective of assembling a group that has the necessary tools to perform its oversight function effectively in light of the Company's business and structure. In determining whether to recommend a director for re-election, the nominating and corporate governance committee may also consider potential conflicts of interest with the candidates, other personal and professional pursuits, the director's past attendance at meetings and participation in and contributions to the activities of the Board.

In identifying prospective director candidates, the nominating and corporate governance committee may seek referrals from other members of the Board, management, stockholders and other sources, including third party recommendations. The nominating and corporate governance committee also may, but need not, retain a third-party search firm in order to assist it in identifying candidates to serve as directors of the Company. The nominating and corporate governance committee uses the same criteria for evaluating candidates regardless of the source of the referral or recommendation. When considering director candidates, the nominating and corporate governance committee seeks individuals with backgrounds and qualities that, when combined with those of our incumbent directors, provide a blend of skills and experience to further enhance the Board's effectiveness. In connection with its annual recommendation of a slate of nominees, the nominating and corporate governance committee also may assess the contributions of those directors recommended for re-election in the context of the Board evaluation process and other perceived needs of the Board. In determining to nominate each director nominee at this Annual Meeting, the nominating and corporate governance committee and the Board evaluated each nominee in accordance with our standard review process for director candidates in connection with a director's initial appointment and his or her nomination for election or re-election, as applicable, at the Annual Meeting.

When considering whether the directors and nominees have the experience, qualifications, attributes and skills, taken as a whole, to enable the Board to satisfy its oversight responsibilities effectively in light of our business and structure, the Board focused primarily on the information discussed in each of the board member's biographical information set forth above. We believe that our directors provide an appropriate mix of experience and skills relevant to the size and nature of our business. This process resulted in the Board's nomination of the incumbent directors named in this Proxy Statement and proposed for election by you at the Annual Meeting.

The nominating and corporate governance committee will consider director candidates recommended by stockholders. The nominating and corporate governance committee will review and evaluate information available to it regarding candidates proposed by stockholders and will apply the same criteria and follow substantially the same process in considering them as it does in considering other director candidates. Stockholders wishing to propose a candidate for consideration may do so by submitting their recommendation to the attention of the Corporate Secretary, BioXcel Therapeutics, Inc., 555 Long Wharf Drive, New Haven, CT 06511.

Board Role in Risk Oversight

The Board has overall responsibility for risk oversight, including, as part of regular Board and committee meetings, general oversight of executives' management of risks relevant to the Company. A fundamental part of risk oversight is not only understanding the material risks a company faces and the steps management is taking to manage those risks, but also understanding what level of risk is appropriate for the Company. The involvement of the Board in reviewing our business strategy is an integral aspect of the Board's assessment of management's tolerance for risk and its determination of what constitutes an appropriate level of risk for the Company. While the full Board has overall responsibility for risk oversight, it is supported in this function by its audit committee, compensation committee and nominating and corporate governance committee. Each of the committees regularly reports to the Board.

The audit committee assists the Board in fulfilling its risk oversight responsibilities by periodically reviewing our accounting, reporting and financial practices, including the integrity of our financial statements, the surveillance of administrative and financial controls, our compliance with legal and regulatory requirements, and our enterprise risk management program, including oversight of financial risks cybersecurity risks and information security risks. Through its regular meetings with management, including the finance, legal, internal audit, tax, compliance, and information technology functions, the audit committee reviews and discusses significant areas of our business and summarizes for the Board areas of risk and the appropriate mitigating factors. The compensation committee assists the Board by overseeing and evaluating risks related to the Company's compensation policies and practices. The nominating and corporate governance committee assists the Board by overseeing and evaluating programs and risks associated with Board organization, membership and structure, and corporate governance. In addition, our Board receives periodic detailed operating performance reviews from management.

Committee Charters and Corporate Governance Guidelines

Our Corporate Governance Guidelines, charters of the audit committee, compensation committee and nominating and corporate governance committee and other corporate governance information are available under the Corporate Governance section of the Investors page of our website located at www.bioxceltherapeutics.com, or by writing to our Corporate Secretary at our offices at 555 Long Wharf Drive, New Haven, CT 06511.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics (the "Code of Conduct") that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions. A copy of our Code of Business Conduct and Ethics is available under the "Governance - Governance Documents" section of the Investors page of our website located at www.bioxceltherapeutics.com, or by writing to our Corporate Secretary at our offices at 555 Long Wharf Drive, New Haven, CT 06511. We intend to make any required disclosures

regarding amendments to, or waivers of, provisions of our Code of Conduct on our website rather than by filing a Current Report on Form 8-K.

Insider Trading Policy

We maintain an Insider Trading Compliance Policy governing the purchase, sale, and other disposition of Company securities that is applicable to all of our directors, officers and employees. This policy is designed to create reasonable processes to prevent the Company and its directors, officers, employees and specified other persons from insider trading and any appearance of improper conduct. We believe our Insider Trading Compliance Policy and procedures are reasonably designed to promote compliance with insider trading laws and any applicable listing exchange standards applicable to the Company. A copy of our Insider Trading Compliance Policy is filed as an exhibit to our Annual Report on Form 10-K for 2024.

The policy additionally prohibits our directors, officers and employees from purchasing financial instruments, such as prepaid variable forward contracts, equity swaps, collars, and exchange funds, or otherwise engaging in transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of our equity securities. All such transactions involving our equity securities, whether such securities were granted as compensation or are otherwise held, directly or indirectly, are prohibited.

Timing of Equity Awards

In response to Item 402(x)(1) of Regulation S-K, the Company does not currently grant new awards of stock options, stock appreciation rights, or similar option-like instruments within four business days before or one business day after the release of a Form 10-Q, 10-K, or 8-K that discloses material nonpublic information (“MNPI”). Accordingly, the Company has no specific policy or practice on the timing of awards of such options in relation to the disclosure of MNPI by the Company.

Compensation Recovery Policy (Clawback Policy)

In 2023, we adopted a Policy for Recovery of Erroneously Awarded Compensation, or “clawback,” policy (the “Clawback Policy”) in accordance with the Nasdaq listing standards and Exchange Act Rule 10D-1. The Clawback Policy provides for the mandatory recovery (subject to limited exceptions) from current and former officers of incentive-based compensation that was erroneously received during the three years preceding the date that the Company is required to prepare an accounting restatement. The Clawback Policy is overseen and administered by the Compensation Committee. The full text of the Clawback Policy was included as Exhibit 97.1 to our Annual Report on Form 10-K for 2024.

Interested Persons’ Communications with the Board

To help foster input and insight from the Company’s stockholders and other interested parties (collectively, “Interested Parties”), Interested Parties may communicate with, or otherwise make his or her concerns known directly to, the Chairperson of the Board, the lead director, if any, any chairperson of a Board committee, or the non-management or independent members of the Board, by addressing such communications to the intended recipient by name or position in care of: BioXcel Therapeutics, Inc., Attn: Chief Legal Officer, 555 Long Wharf Drive, New Haven, Connecticut 06511. The Chief Legal Officer will forward such communications to the appropriate party.

EXECUTIVE COMPENSATION

The following is a discussion of the compensation arrangements of our named executive officers (“NEOs”). As a smaller reporting company, we are not required to include a Compensation Discussion and Analysis section and have elected to comply with the scaled disclosure requirements applicable to smaller reporting companies.

Our NEOs include our principal executive officer and our two most highly compensated executive officers, other than our principal executive officer, for the fiscal year ended December 31, 2024. These NEOs and their positions are:

1. Vimal Mehta, Ph.D., our Chief Executive Officer and President;
2. Javier Rodriguez, our Senior Vice President, Chief Legal Officer and Corporate Secretary; and
3. Richard Steinhart, our Senior Vice President and Chief Financial Officer.

Summary Compensation Table for 2023 and 2024

The following table shows information regarding the compensation of our NEOs for the years presented.

Name and Principal Position	Year	Salary (\$)	Stock Awards (\$) ⁽¹⁾	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$) ⁽²⁾	Total (\$)
Vimal Mehta, Ph.D.	2024	1,001,570	—	101,250	—	16,425	1,119,245
<i>Chief Executive Officer</i>	2023	1,001,569	1,097,600	2,615,928	—	16,050	4,731,147
Javier Rodriguez	2024	423,833	181,755	398,530	—	8,625	1,012,552
<i>Senior VP and Chief Legal Officer</i>	2023	423,833	191,588	498,272	—	8,250	1,121,943
Richard Steinhart	2024	409,872	181,755	398,339	—	4,128	998,216
<i>SVP and Chief Financial Officer</i>							

- (1) The amounts reported represent the grant date fair value of performance-based units, restricted stock units and stock options granted to our NEOs as computed in accordance with Accounting Standards Codification 718, Compensation — Stock Compensation (ASC 718). For all performance-based units, the amounts were calculated based on the probable outcome of the performance condition as of the grant date. The following are the values of the performance-based units as of the grant date assuming attainment of the maximum level of performance: Dr. Mehta (\$300,000), Mr. Rodriguez (\$84,000) and Mr. Steinhart (\$84,000). Note that the amounts reported in these columns reflect the accounting cost for these awards and do not correspond to the actual economic value that may be received by our NEOs from the awards. We provided information regarding the assumptions used to calculate the value of the restricted stock units and stock options in Note 12 to the financial statements included in the Annual Report on Form 10-K for the year ended December 31, 2024.
- (2) The amounts reported for 2024 represent reimbursement for healthcare benefits (\$7,800) and (\$4,128) for Dr. Mehta and Mr. Steinhart, respectively, and 401(k) matching contributions of (\$8,625) for each named executive officer other than Mr. Steinhart.

Narrative to Summary Compensation Table

2024 Salaries

Our NEOs receive a base salary to compensate them for services rendered to the Company. The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive’s skill set, experience, role and responsibilities. The base salaries of our NEOs are reviewed from time to time and adjusted when our Board or compensation committee determines an adjustment is appropriate. The compensation committee determined not to increase the salaries of the NEOs in 2024.

2024 Annual Bonuses

We offer our NEOs the opportunity to earn discretionary annual cash bonuses to compensate them for attaining company and individual performance goals. Each NEO’s target bonus opportunity is expressed as

a percentage of annual base salary. Pursuant to the Fifth Amendment to the Credit Agreement, we are restricted from paying cash bonuses to our employees or executives during the fiscal years 2024 and 2025 without OFA's consent or increasing the cash compensation for fiscal year 2025 for certain senior officers of the Company from their compensation for fiscal year 2024.

The performance goals for annual bonuses are reviewed and approved annually by the compensation committee. For 2024, the annual bonus metrics established by the compensation committee were based on the achievement of certain company performance goals, as well as an assessment of individual performance. In early 2025 the Board determined that it would use its discretion to not award annual bonuses for 2024 performance to the NEOs.

Equity Compensation

During 2024, we awarded stock options, time-based restricted stock units and performance-based restricted stock units ("PSUs") to our NEOs as the long-term incentive component of our executive compensation program. We typically grant equity awards at such times as our Board determines appropriate. The following table sets forth the equity awards we granted to our NEOs during 2024:

Name	2024 Equity Awards Granted (#)		
	Options	RSUs	PSUs
Vimal Mehta, Ph.D.	6,250	—	15,625
Javier Rodriguez	1,875	625	4,375
Richard Steinhart	1,875	625	4,375

The options were granted with exercise prices equal to the fair market value of our common stock on the date of grant. The stock options generally vest and becomes exercisable as to 50% of the total number of shares underlying the option on each of the first and second anniversaries of the date of grant and the remaining become fully vested on the second anniversary of the date of the grant, subject, in each case, to the holder's continued service through the applicable vesting date. The time-based restricted stock units generally vest fully on the first anniversary of the date of the grant, subject, in each case, to the holder's continued service through the applicable vesting date.

The PSUs granted to Dr. Mehta, Mr. Rodriguez and Mr. Steinhart are eligible to vest within thirty days of the first anniversary of the grant date the participants continued employment with the Company and based on the attainment of the following performance metrics, as determined by the Board: (i) a satisfactory completion of securing at least \$25 million of additional funding for the Company (50% of the PSUs); (ii) successfully initiates trials for its Serenity and Tranquility programs and progress towards data readouts for such program trials (25% of the PSUs); (iii) significant progress towards achieving \$5 million in IGALMI revenues (15% of the PSUs); and (iv) making progress towards securing a partnership deal (10% of the PSUs). The Board decided to grant PSUs during 2024 in order to further align the interests of Dr. Mehta, Mr. Rodriguez and Mr. Steinhart with the strategic clinical and operational objectives of the Company.

Refer to the "Outstanding Equity Awards at Year End" table below for additional information regarding the equity awards granted to our NEOs during 2024.

Other Elements of Compensation

Our NEOs are eligible to participate in our employee benefit plans and programs, which generally include medical, dental and vision benefits, and life, short-term, and long-term disability insurance to the same extent as our other full-time employees generally, subject to the terms and eligibility requirements of those plans. During 2024, we reimbursed Dr. Mehta for his healthcare premium payments.

We maintain a 401(k) defined contribution plan (the "401(k) Plan"), for the benefit of our employees who satisfy certain eligibility requirements. Our NEOs are eligible to participate in the 401(k) Plan on the same terms as other full-time employees. In 2024, we matched employee contributions to the 401(k) Plan up to 50% of the first 5% of eligible compensation.

The amounts paid pursuant to these arrangements are set forth in the Summary Compensation Table in the column entitled “All Other Compensation.”

Outstanding Equity Awards at Fiscal Year End 2024

The following table sets forth all outstanding equity awards held by each of the NEOs as of December 31, 2024.

Name	Vesting Commencement Date	Option Awards				Stock Awards			
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$) ⁽¹⁾	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$) ⁽¹⁾
Vimal Mehta, Ph.D.	08/23/2017	18,376	—	6.56	08/23/2027	—	—	—	—
	05/23/2019	11,732	—	160.64	05/23/2029	—	—	—	—
	05/26/2020	15,625	—	735.84	05/26/2030	—	—	—	—
	03/25/2021	14,647	978	658.72	03/25/2031	—	—	—	—
	03/14/2022 ⁽⁴⁾	7,170	3,268	244.96	03/14/2032	—	—	—	—
	03/14/2022 ⁽⁴⁾	—	—	—	—	816	\$ 4,882	—	—
	03/15/2023 ⁽³⁾	4,588	5,913	313.60	03/14/2033	—	—	—	—
	03/15/2023 ⁽⁵⁾	—	—	—	—	1,969	\$11,779	—	—
	07/22/2024 ⁽⁷⁾	—	6,250	19.20	07/22/2034	—	—	—	—
07/22/2024 ⁽⁶⁾	—	—	—	—	—	—	15,625	\$93,475	
Javier Rodriguez	02/22/2021	1,917	84	878.40	02/22/2031	—	—	—	—
	08/16/2021	523	103	381.44	08/16/2031	—	—	—	—
	03/14/2022 ⁽²⁾	1,427	659	244.96	03/14/2032	—	—	—	—
	03/14/2022 ⁽⁴⁾	—	—	—	—	163	\$ 975	—	—
	03/15/2023 ⁽³⁾	869	1,132	313.60	03/15/2033	—	—	—	—
	03/15/2023 ⁽⁵⁾	—	—	—	—	317	\$ 1,896	—	—
	07/22/2024 ⁽⁷⁾	—	1,875	19.20	07/22/2034	—	—	—	—
	07/22/2024 ⁽⁸⁾	—	—	—	—	625	3,739	—	—
07/22/2024 ⁽⁶⁾	—	—	—	—	—	—	4,375	\$26,173	

Name	Vesting Commencement Date	Option Awards				Stock Awards			
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$) ⁽¹⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$) ⁽¹⁾
Richard Steinhart	10/02/2017	5,010	—	18.00	01/17/2032	—	—	—	—
	03/12/2018	2,016	—	176.00	03/12/2028	—	—	—	—
	05/26/2020	3,438	—	735.84	05/25/2030	—	—	—	—
	03/25/2021	1,172	79	658.72	03/25/2031	—	—	—	—
	03/14/2022 ⁽³⁾	1,430	655	244.96	03/14/2032	—	—	—	—
	03/14/2022 ⁽⁴⁾	—	—	—	—	163	\$ 975	—	—
	03/15/2023 ⁽³⁾	869	1,132	313.60	03/15/2033	—	—	—	—
	03/15/2023 ⁽⁵⁾	—	—	—	—	317	\$ 1,896	—	—
	07/22/2024 ⁽⁷⁾	—	1,875	19.60	03/14/2033	—	—	—	—
	07/22/2024 ⁽⁸⁾	—	—	—	—	625	\$ 3,739	—	—
07/22/2024 ⁽⁶⁾	—	—	—	—	—	—	4,375	\$26,173	

(1) The amounts shown are based on the closing price of our common stock on December 31, 2024 of \$5.9840 per share. For the restricted stock units in Employee Holdings, the amount shown is based on the fair market value of such awards as of December 31, 2024.

(2) The unvested portion of the option vests in substantially equal monthly installments until the fourth anniversary of the vesting commencement date.

(3) The option vests as to 25% of the shares on the first anniversary of the vesting commencement date and in substantially equal monthly installments thereafter until the fourth anniversary of the vesting commencement date.

(4) The RSUs vest in substantially equal quarterly installments until the fourth anniversary of the vesting commencement date.

(5) The RSUs vest as to 25% of the shares on the first anniversary of the vesting commencement date and in substantially equal quarterly installments thereafter until the fourth anniversary of the vesting commencement date.

(6) The PSUs are eligible to vest on the first anniversary of the vesting commencement date based on the Board's determination that certain Company performance metrics have been attained. See "Equity Compensation" above for a description of these metrics.

(7) The option vests as to 50% of the shares on each of the first and second anniversaries of the grant date.

(8) The RSUs vest on the first anniversary of the grant date.

Employment Arrangements

We have entered into employment agreements with each of our NEOs that set forth the terms and conditions of each executive's employment with us. All descriptions of the employment agreements herein describe the agreements in effect as of December 31, 2024, and do not reflect subsequent amendments.

Each employment agreement establishes an annual base salary and target bonus opportunity for each NEO. The amounts in effect during 2024 are described above under the headings "2024 Salaries" and "2024 Annual Bonuses." The NEOs are eligible to participate in our employee benefit plans and programs for which the NEO is eligible, subject to the terms and conditions of such plans and programs.

During 2024, in the event that an NEO was terminated by us without cause, or by the executive for good reason, subject to the NEO's timely execution and non-revocation of a release of claims in our favor, the

executive would have been eligible to receive (i) a pro-rated portion of the executive's annual bonus for the year of termination; (ii) base salary continuation for 24 months for Dr. Mehta, 6 months for Mr. Rodriguez and Mr. Steinhart; and (iii) reimbursement for COBRA premium payments for the applicable severance period. In addition, Dr. Mehta would be entitled to vesting of 50% of any unvested equity awards held by him immediately prior to his termination. The Company must provide an NEO 30 days' notice in the event we terminate such NEO without cause.

The employment agreements also provide that, in the event an NEO's employment is terminated by us without cause or by the NEO for good reason, in either case, within 6 months prior to or 12 months after a change in control, then, subject to the NEO's timely execution and non-revocation of a release of claims in our favor, the NEO will be entitled to a lump sum payment equal to 6 months of base salary (or 24 months of base salary for Dr. Mehta), which payment is in addition to the severance payments and benefits described above.

The employment agreements generally define "cause" as, subject to certain notice and cure rights, the NEO's (i) material breach or material default of the employment agreement or any other agreement between us and the NEO, or repeated failure to follow the direction of the Company or our Board, as applicable; (ii) gross negligence, willful misfeasance or breach of fiduciary duty to us or our affiliates; (iii) commission of an act or omission involving fraud, embezzlement, misappropriation or dishonesty in connection with NEO's duties to us or our affiliates, or, for Mr. Rodriguez or Mr. Steinhart, that is otherwise likely to be materially injurious to the business or reputation of the Company or our affiliates; or (iv) conviction of, indictment for, or pleading guilty or nolo contendere to, any felony or other crime involving fraud or moral turpitude.

The employment agreements generally define "good reason" as, subject to certain notice and cure rights, the occurrence of any of the following (without the NEO's express written consent): (i) a significant reduction of the NEO's duties, position or responsibilities, or the removal of the NEO from such position, duties or responsibilities; (ii) for Dr. Mehta and Mr. Rodriguez only, the relocation of the NEO by more than 25 miles; or (iii) any action or inaction that constitutes a material breach by us or any of our successors of its obligations to the NEO under the employment agreement (or for Dr. Mehta, any other agreement between us and Dr. Mehta).

The employment agreements also contain covenants prohibiting the NEOs from competing with us or soliciting our suppliers, employees or customers during employment and for a period of one year following termination.

PAY VERSUS PERFORMANCE DISCLOSURE

In accordance with rules adopted by the Securities and Exchange Commission pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we provide the following disclosure regarding executive compensation for our principal executive officer (“PEO”) and non-PEO NEOs (“Non-PEO NEOs”) and Company performance for the fiscal years listed below. The Compensation Committee did not consider the pay versus performance disclosure below in making its pay decisions for any of the years shown.

Year	Summary Compensation Table Total for PEO ⁽¹⁾ (\$)	Compensation Actually Paid to PEO ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Average Summary Compensation Table Total for Non-PEO NEOs ⁽¹⁾ (\$)	Average Compensation Actually Paid to Non-PEO NEOs ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Value of Initial Fixed \$100 Investment based on: ⁽⁴⁾ TSR (\$)	Net Income (\$ Millions)
2024	1,119,245	385,616	1,005,384	256,746	1.84	(59.6)
2023	4,731,147	(2,861,394)	1,193,169	(36,792)	14.51	(179.1)
2022	4,559,195	5,369,113	1,573,118	1,734,613	105.66	(165.8)

- (1) Vimal Mehta was our PEO for each year presented. The individuals comprising the Non-PEO NEOs for each year presented are listed below.

2024

Javier Rodriguez
Richard Steinhart

2023

Javier Rodriguez
Matthew Wiley

2022

Javier Rodriguez
Matthew Wiley

- (2) The amounts shown for Compensation Actually Paid have been calculated in accordance with Item 402(v) of Regulation S-K and do not reflect compensation actually earned, realized, or received by the Company’s NEOs. These amounts reflect the Summary Compensation Table Total with certain adjustments as described in footnote 3 below.
- (3) Compensation Actually Paid reflects the exclusions and inclusions of certain amounts for the PEO and the Non-PEO NEOs as set forth below. Equity values are calculated in accordance with FASB ASC Topic 718. Amounts in the Exclusion of Stock Awards and Option Awards column are the totals from the Stock Awards and Option Awards columns set forth in the Summary Compensation Table for the applicable year.
- (4) Assumes \$100 was invested in the Company for the period starting December 31, 2021, through the end of the listed year. Historical stock performance is not necessarily indicative of future stock performance.

Year	Summary Compensation Table Total for PEO (\$)	Exclusion of Stock Awards and Option Awards for PEO (\$)	Inclusion of Equity Values for PEO (\$)	Compensation Actually Paid to PEO (\$)
2024	1,119,245	(101,250)	(632,379)	385,616
2023	4,731,147	(3,713,528)	(3,879,013)	(2,861,394)
2022	4,559,195	(2,794,672)	3,604,590	5,369,113

Year	Average Summary Compensation Table Total for Non-PEO NEOs (\$)	Average Exclusion of Stock Awards and Option Awards for Non-PEO NEOs (\$)	Average Inclusion of Equity Values for Non-PEO NEOs (\$)	Average Compensation Actually Paid to Non-PEO NEOs (\$)
2024	1,005,384	(580,190)	(168,448)	256,746
2023	1,193,169	(750,402)	(479,559)	(36,792)
2022	1,573,118	(943,615)	1,105,110	1,734,613

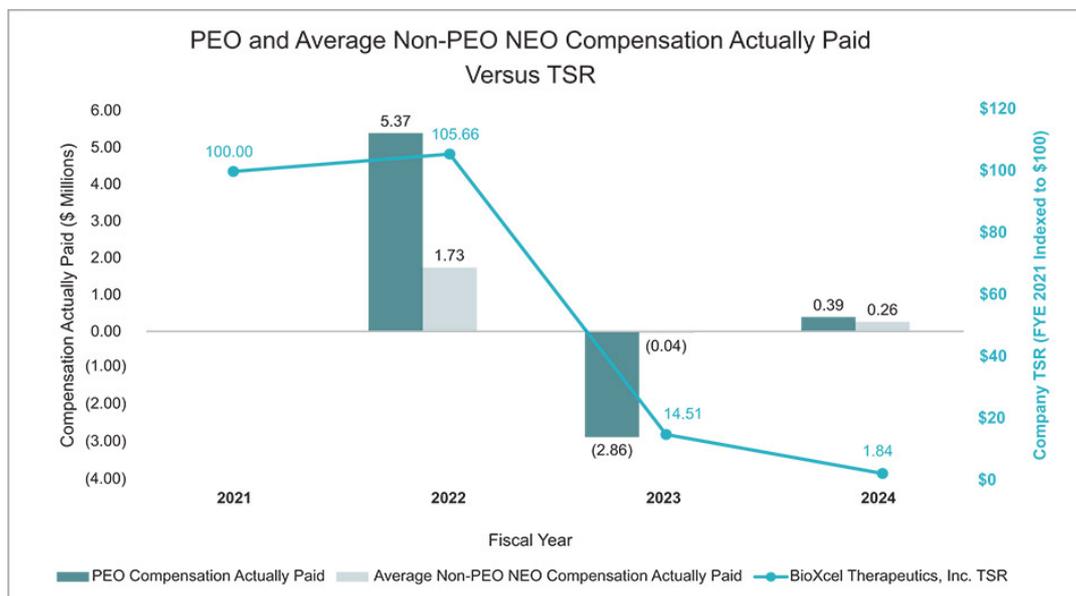
The amounts in the Inclusion of Equity Values in the tables above are derived from the amounts set forth in the following tables:

Year	Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for PEO (\$)	Change in Fair Value from Last Day of Prior Year to Last Day of Year of Unvested Equity Awards for PEO (\$)	Vesting-Date Fair Value of Equity Awards Granted During Year that Vested During Year for PEO (\$)	Change in Fair Value from Last Day of Prior Year to Vesting Date of Unvested Equity Awards that Vested During Year for PEO (\$)	Fair Value at Last Day of Prior Year of Equity Awards Forfeited During Year for PEO (\$)	Value of Dividends or Other Earnings Paid on Equity Awards Not Otherwise Included for PEO (\$)	Total-Inclusion of Equity Values for PEO (\$)
2024	31,417	(453,921)	0	(209,875)	0	0	(632,379)
2023	559,749	(3,307,796)	0	(1,130,966)	0	0	(3,879,013)
2022	4,104,279	34,081	0	(533,770)	0	0	3,604,590

Year	Average Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for Non-PEO NEOs (\$)	Average Change in Fair Value from Last Day of Prior Year to Last Day of Year of Unvested Equity Awards for Non-PEO NEOs (\$)	Average Vesting-Date Fair Value of Equity Awards Granted During Year that Vested During Year for Non-PEO NEOs (\$)	Average Change in Fair Value from Last Day of Prior Year to Vesting Date of Unvested Equity Awards that Vested During Year for Non-PEO NEOs (\$)	Average Fair Value at Last Day of Prior Year of Equity Awards Forfeited During Year for Non-PEO NEOs (\$)	Average Value of Dividends or Other Earnings Paid on Equity Awards Not Otherwise Included for Non-PEO NEOs (\$)	Total-Average Inclusion of Equity Values for Non-PEO NEOs (\$)
2024	13,164	(84,378)	0	(97,234)	0	0	(168,448)
2023	184,573	(600,850)	0	(63,282)	0	0	(479,559)
2022	1,143,018	1,295	0	(39,203)	0	0	1,105,110

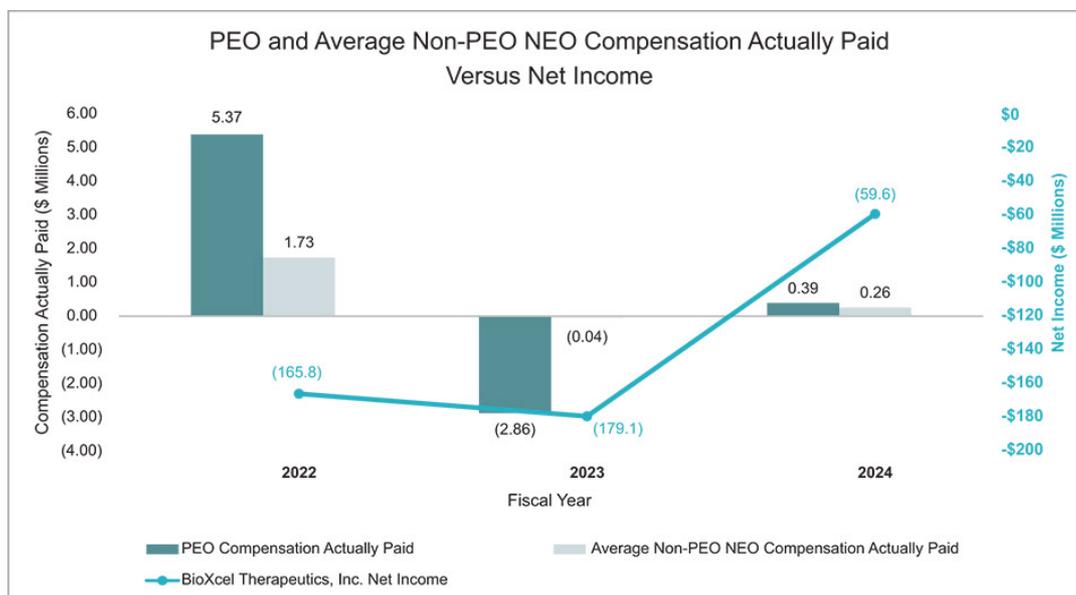
Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Company Total Shareholder Return (“TSR”)

The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and the Company’s cumulative TSR over the three most recently completed fiscal years.



Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Net Income

The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and our Net Income during the three most recently completed fiscal years.



DIRECTOR COMPENSATION

The non-employee members of our Board are eligible to receive compensation for their service on our Board. Under our director compensation program, during 2024 each non-employee director was eligible to receive an option to purchase 1,875 shares of common stock upon such director's initial election or appointment to the Board. Additionally, each non-employee director who has been serving as a non-employee director for at least six months as of the date of any annual meeting of stockholders and will continue to serve as a non-employee director immediately following such meeting, was eligible to receive an option to purchase 1,062 shares of common stock on the date of such annual meeting. The options granted to our non-employee directors have an exercise price equal to the fair market value of our common stock on the date of grant and expire not later than ten years after the date of grant. The stock options granted upon a director's initial election or appointment vest in three substantially equal annual installments following the date of grant. The stock options granted annually to directors vest in a single installment on the earlier of the day before the next annual meeting or the first anniversary of the date of grant. In addition, all unvested stock options vest in full upon the occurrence of a change in control.

In lieu of compensation pursuant to the Company's director compensation program, Mr. Mack entered into an offer letter with the Company upon his appointment as a director in November 2024, pursuant to which Mr. Mack received (i) a cash payment of \$90,000, paid in monthly installments of \$15,000 on the last date of each month for six months beginning November 30, 2024 and (ii) a grant of RSUs under the Company's 2020 Incentive Award Plan for an aggregate of 20,317 shares of the Company's common stock underlying the RSUs. The RSUs vest in twelve equal installments on the last date of each month beginning on November 30, 2024. Following his service as a member of the Board for 12 months, he will receive compensation in accordance with the Company's director compensation program.

In addition, our non-employee directors were eligible to receive cash retainers for service on our Board and committees of our Board during 2024 as set forth in the table below.

Position	Amount
Base Board Fee	\$60,000
Chair of Board or Lead Independent Director	\$35,000
Chair of Audit Committee	\$20,000
Chair of Compensation Committee	\$15,000
Chair of Nominating and Corporate Governance Committee	\$10,000
Member of Audit Committee (non-Chair)	\$10,000
Member of Compensation Committee (non-Chair)	\$ 7,500
Member of Nominating and Corporate Governance Committee (non-Chair)	\$ 5,000

Director fees under the program are payable in arrears in four equal quarterly installments not later than the fifteenth day following the final day of each calendar quarter, *provided* that the amount of each payment will be prorated for any portion of a quarter that a director is not serving on our board.

We also reimburse all of our non-employee directors for all reasonable and customary business expenses in accordance with company policy.

Director Compensation Table for 2024

The following table sets forth information for the year ended December 31, 2024 regarding the compensation awarded to, earned by or paid to our non-employee directors:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	Total (\$)
Peter Mueller, Ph.D.	\$ 130,000	\$ —	20,410 ⁽²⁾	\$ 150,410
Sandeep Laumas, M.D.	\$ 92,500	\$ —	20,410 ⁽³⁾	\$ 112,910
Michal Votruba, M.D.	\$ 70,000	\$ —	20,410 ⁽⁴⁾	\$ 90,410
June Bray	\$ 65,000	\$ —	20,410 ⁽⁵⁾	\$ 85,410
Michael Miller	\$ 70,000	\$ —	20,410 ⁽⁶⁾	\$ 90,410
David Mack	\$ 30,000 ⁽⁸⁾	\$ 185,619 ⁽⁷⁾	—	\$ 215,619

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- (1) The amounts reported represent the grant date fair value of stock options granted to our non-employee directors as computed in accordance with ASC 718. Note that the amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by the recipients from the options. We provide information regarding the assumptions used to calculate the value of the option awards in Note 12 to our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2024.
 - (2) As of December 31, 2024, Dr. Mueller held options to purchase an aggregate of 16,667 shares of our common stock, of which 15,604 shares of common stock were exercisable.
 - (3) As of December 31, 2024, Dr. Laumas held options to purchase an aggregate of 14,028 shares of our common stock, of which 12,965 shares of common stock were exercisable.
 - (4) As of December 31, 2024, Dr. Votruba held options to purchase an aggregate of 6,265 shares of our common stock, of which 5,202 shares of common stock were exercisable.
 - (5) As of December 31, 2024, Ms. Bray held options to purchase an aggregate of 5,013 shares of our common stock, of which 3,950 shares of common stock were exercisable.
 - (6) As of December 31, 2024, Mr. Miller held options to purchase an aggregate of 4,001 shares of our common stock, of which 2,938 shares of common stock were exercisable.
 - (7) As of December 31, 2024, Mr. Mack held 16,932 unvested restricted stock units, representing 83% of the Stock Awards granted to Mr. Mack in 2024.
 - (8) As of December 31, 2024, Mr. Mack earned \$30,000 in board fees for services provided since joining the Board in November 2024.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain information with respect to the Company's equity compensation plans in effect as of December 31, 2024:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) ⁽⁴⁾ (c)
Equity compensation plans approved by security holders ⁽¹⁾	407,477 ⁽²⁾	\$265.36 ⁽³⁾	117,044
Equity compensation plans not approved by security holders	—	—	—
Total	407,477	\$265.36	117,044

- (1) Consists of the BioXcel Therapeutics, Inc. 2017 Incentive Award Plan (the "2017 Plan"), the BioXcel Therapeutics, Inc. 2020 Incentive Award Plan (the "2020 Plan") and the BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan (the "2020 ESPP").
- (2) Includes 119,781 outstanding options to purchase shares under the 2017 Plan, 69,506 performance-based units, 26,898 restricted stock units and 191,292 outstanding options to purchase shares under the 2020 Plan.
- (3) As of December 31, 2024, the weighted-average exercise price of outstanding options under the 2017 Plan was \$59.74 and the weighted-average exercise price of outstanding options under the 2020 Plan was \$394.11. The weighted average exercise price of outstanding awards does not take into account the shares issuable upon vesting of outstanding performance-based units and restricted stock units which have no exercise price.
- (4) Includes 41,748 shares available for future issuance under the 2020 Plan and 75,296 shares available for issuance under the 2020 ESPP. Following the effective date of the 2020 Plan, we ceased making grants under the 2017 Plan. To the extent outstanding awards under the 2017 Plan are forfeited or lapse unexercised, the shares of common stock subject to such awards will be available for issuance under the 2020 Plan. The 2020 Plan provides for an annual increase to the number of shares available for issuance thereunder on the first day of each calendar year beginning on January 1, 2021 and ending on and including January 1, 2030, by an amount equal to the lesser of (i) 4% of the aggregate number of shares of common stock outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares of common stock as determined by our Board (but no more than 625,000 shares may be issued upon the exercise of incentive stock options). The 2020 ESPP provides for an annual increase to the number of shares available for issuance thereunder on the first day of each calendar year beginning on January 1, 2021 and ending on and including January 1, 2030, by an amount equal to the lesser of (i) 1% of the aggregate number of shares of common stock outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares of common stock as is determined by our Board, provided that no more than 31,250 shares of our common stock may be issued under the component of the 2020 ESPP that is intended to qualified under Section 423 of the Code. As of the date of this proxy statement, we have not commenced offering periods under the 2020 ESPP.

STOCK OWNERSHIP

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information relating to the beneficial ownership of our common stock as of October 31, 2025 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding shares of common stock;
- each of our directors and director nominees;
- each of our named executive officers for 2024; and
- all of our current directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC. Under these rules, a person is deemed to be a “beneficial” owner of a security if that person has or shares voting power or investment power, which includes the power to dispose of or to direct the disposition of such security. Except as indicated in the footnotes below, we believe, based on the information furnished to us, that the individuals and entities named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned by them, subject to any applicable community property laws.

The percentage of shares beneficially owned is computed on the basis of 21,765,678 shares of our common stock outstanding as of October 31, 2025. Shares of our common stock that a person has the right to acquire within 60 days of October 31, 2025 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o 555 Long Wharf Drive, New Haven, CT 06511.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
<i>Named executive officers and directors:</i>		
Vimal Mehta, Ph.D. ⁽¹⁾	620,642	2.8%
Javier Rodriguez ⁽²⁾	14,167	*
Richard Steinhart ⁽³⁾	38,504	*
June Bray ⁽⁴⁾	5,013	*
Sandeep Laumas, M.D. ⁽⁵⁾	14,028	*
Michael Miller ⁽⁶⁾	4,001	*
Peter Mueller, Ph.D. ⁽⁷⁾	28,354	*
Michal Votruba, M.D. ⁽⁸⁾	17,788	*
David Mack ⁽⁹⁾	20,317	*
Rajiv Patni ⁽¹⁰⁾	938	*
<i>All executive officers and directors as a group</i> (11 individuals) ⁽¹¹⁾	800,281	3.7%

* Represents less than 1%.

- (1) Represents for Dr. Mehta: (i) 20,618 shares of common stock (of which 125 shares are owned jointly with Dr. Mehta’s spouse); (ii) options to purchase 119,298 shares of our common stock that can be exercised within 60 days of October 31, 2025; (iii) 383 restricted stock units that vest within 60 days of October 31, 2025; and (iv) 480,343 shares of common stock held by BioXcel LLC as to which Dr. Mehta may be deemed to have beneficial ownership. BioXcel LLC is majority owned and controlled by BioXcel Holdings, Inc. BioXcel LLC is a subsidiary of BioXcel Holdings, Inc. Mr. Mehta is an executive officer and the sole member of the board of directors of BioXcel Holdings, Inc. and an executive officer and one of two managers on the board of managers of BioXcel LLC and BioXcel Holdings, Inc. As such, each of Mr. Mehta and BioXcel Holdings, Inc. may be deemed to beneficially own the Common Stock held of record by BioXcel LLC.

- (2) Represents for Mr. Rodriguez: (i) 7,207 shares of common stock; (ii) 68 restricted stock units that vest within 60 days of October 31, 2025 and (iii) options to purchase 6,892 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (3) Represents for Mr. Steinhart: (i) 6,989 shares of common stock; (ii) 68 restricted stock units that vest within 60 days of October 31, 2025; and (iii) options to purchase 31,447 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (4) Represents for Ms. Bray: options to purchase 5,013 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (5) Represents for Dr. Laumas: options to purchase 14,028 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (6) Represents for Mr. Miller: options to purchase 4,001 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (7) Represents for Dr. Mueller: (i) 11,687 shares of common stock held by Dr. Mueller (including shares of our common stock held by the Peter Mueller 2018 Irrevocable Family Trust, as to which Dr. Mueller serves as trustee); and (ii) options to purchase 16,667 shares of our common stock that can be exercised within 60 days of October 31, 2025.
- (8) Represents for Dr. Votruba: 11,523 shares of our common stock held by RSJ Investments SICAV a.s. (“RSJ/Gradus”) and over which Dr. Votruba, an asset manager at RSJ/Gradus, has voting and/or dispositive power. Also includes options to purchase 6,265 shares of our common stock that can be exercised within 60 days of October 31, 2025, which options Dr. Votruba was granted in respect of his service on our Board but as to which he assigned to RSJ/Gradus pursuant to the policies of RSJ/Gradus regarding stock ownership by employees.
- (9) Represents for Mr. Mack: 20,317 shares of our common stock.
- (10) Represents for Mr. Patni: options to purchase 938 shares of our common stock that vest within 60 days of October 31, 2025.
- (11) Includes options to purchase 234,146 shares of our common stock that can be exercised within 60 days of October 31, 2025 and 587 RSUs that vest within 60 days of October 31, 2025.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who beneficially own more than 10% of our common stock to file with the SEC reports of their ownership and changes in their ownership of our common stock. To our knowledge, based solely on review of the copies of such reports and amendments to such reports with respect to the year ended December 31, 2024 filed with the SEC and on written representations by our directors and executive officers, all required Section 16 reports under the Exchange Act for our directors, executive officers, principal accounting officer and beneficial owners of greater than 10% of our common stock were filed on a timely basis during the year ended December 31, 2024 other than the following:

- Late Form 4 filings filed on April 8, 2024 for Vimal Mehta, Vincent O’Neill, Javier Rodriguez, Richard Steinhart, Matthew Wiley and Frank Yocca with respect to RSU grants that occurred on March 14 and 15, 2024, as applicable;
- Late Form 4 filings filed on April 1, 2025 for Vimal Mehta, Vincent O’Neill, Matthew Wiley and Frank Yocca with respect to stock option grants that occurred on July 22, 2024; and
- Late Form 4 filings filed on April 1, 2025 for Javier Rodriguez and Richard Steinhart with respect to RSU grants that occurred on July 22, 2024.

CERTAIN TRANSACTIONS WITH RELATED PERSONS

Policies and Procedures on Transactions with Related Persons

Our Board recognizes that transactions with related persons present a heightened risk of conflicts of interests and/or improper valuation (or the perception thereof). Our Board has adopted a written policy on transactions with related persons, which requires that our audit committee approve or ratify related person transactions required to be disclosed pursuant to Item 404(a). Item 404 of Regulation S-K requires disclosure, subject to certain exceptions, of transactions in which we were or are to be a participant and the amount involved exceeds \$120,000 (or such other amount is applicable while we remain a smaller reporting company) and in which any “related person” as defined under Item 404(a) of Regulation S-K had or will have a direct or indirect material interest. It is our policy that directors interested in a related person transaction will recuse themselves from any vote on a related person transaction in which they have an interest and that no director may participate in the approval of a related person transaction for which he or she is a “related person.” Each of the transactions described below entered into following the adoption of our related person transaction policy was approved in accordance with such policy.

March 2024 Registered Direct Offering

On March 27, 2024, we completed a registered direct offering, which resulted in the issuance and sale of (i) 190,913 shares of our common stock, (ii) pre-funded warrants to purchase up to 347,814 shares of our common stock at an exercise price of \$0.016 per share and (iii) accompanying warrants to purchase up to 538,728 shares of our common stock at an exercise price of \$51.20 per share. The combined offering price of the common stock and accompanying warrants was \$46.416 per share and share underlying each accompanying warrant, and the combined offering price of the Armistice pre-funded warrants and accompanying warrants was \$46.40 per share underlying each pre-funded warrant and accompanying warrant. The Armistice pre-funded warrants and the accompanying warrants are exercisable at any time after the date of issuance, however, the accompanying warrants will expire on the fifth anniversary of the date of issuance. A holder of Armistice pre-funded warrants will not be entitled to exercise any portion of such Armistice pre-funded warrants which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Armistice Pre-Funded Warrants. A holder of Accompanying Warrants will not be entitled to exercise any portion of such Accompanying Warrants which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 4.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Accompanying Warrants. In each case, such percentages may be increased by a holder of Armistice Warrants to any other percentage not in excess of 19.99% upon at least 61 days’ prior notice from the holder to us. We received net proceeds of approximately \$24.9 million from this offering, after deducting offering expenses. On November 21, 2024, the exercise price of warrants to purchase 538,728 shares of common stock issued in March 2024 Registered Direct Offering described here was reduced to \$9.136 per share.

November 2024 Offering

On November 25, 2024, we completed an offering, which resulted in the issuance and sale to Armistice of (i) 283,854 shares of our common stock, (ii) pre-funded warrants to purchase up to 562,500 shares of our common stock at an exercise price of \$0.016 per share and (iii) accompanying warrants to purchase up to 846,355 shares of our common stock at an exercise price of \$7.68 per share. The combined offering price of the common stock and accompanying warrants was \$7.68 per share and share underlying each accompanying warrant, and the combined offering price of the Armistice pre-funded warrants and

accompanying warrants was \$7.664 per share underlying each pre-funded warrant and accompanying warrant. The Armistice pre-funded warrants and the accompanying warrants are exercisable at any time after the date of issuance, however, the accompanying warrants will expire on the fifth anniversary of the date of issuance. A holder of Armistice pre-funded warrants will not be entitled to exercise any portion of such Armistice pre-funded warrants which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Armistice pre-funded warrants. A holder of accompanying warrants will not be entitled to exercise any portion of such accompanying warrants which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 4.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the accompanying warrants. In each case, such percentages may be increased by a holder of Armistice Warrants to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

BioXcel LLC

BioXcel LLC owned approximately 2.21% of the shares of our outstanding common stock as of October 31, 2025. BioXcel LLC is the successor in interest to BioXcel Corporation, our former parent. BioXcel LLC is a subsidiary of, and majority owned and controlled by BioXcel Holdings, Inc. Vimal Mehta and affiliated trusts are significant stockholders of BioXcel Holdings, Inc. Dr. Mehta is also an executive officer and the sole member of the board of managers of BioXcel Holdings, Inc. and an executive officer and one of two managers of BioXcel LLC and BioXcel Holdings, Inc.

Amended and Restated Asset Contribution Agreement with BioXcel LLC

We entered into an asset contribution agreement, effective June 30, 2017, with BioXcel LLC (formerly BioXcel Corporation), as amended and restated on November 7, 2017, pursuant to which BioXcel LLC contributed to us, and we acquired from BioXcel LLC, all of BioXcel LLC's rights, title and interest in and to BXCL501, BXCL701, BXCL502 and BXCL702 (collectively, the "Candidates") and all of the assets and liabilities associated with the Candidates, in consideration for (i) 592,500 shares of our common stock, (ii) \$1 million upon completion of our initial public offering ("IPO"), (iii) \$500,000 upon the later of the 12 month anniversary of our IPO and the first dosing of a patient in the bridging bioavailability/bioequivalence study for the BXCL501 program, (iv) \$500,000 upon the later of the 12 month anniversary of our IPO and the first dosing of a patient in the Phase 2 Proof of Concept open label monotherapy or combination trial with Keytruda for the BXCL701 program and (v) a one-time payment of \$5 million within 60 days after the achievement of \$50 million in cumulative net sales of any product or combination of products resulting from the development and commercialization of any one of the Candidates or a product derived therefrom. There were no such payments during the years ended December 31, 2023 or 2024 pursuant to such provisions in the Contribution Agreement.

Amended and Restated Separation and Shared Services Agreement

We entered into a separation and shared services agreement, dated June 30, 2017, or the Effective Date, with BioXcel LLC (formerly BioXcel Corporation), as amended and restated thereafter, pursuant to which services provided by BioXcel LLC through its subsidiaries in India and the United States will continue indefinitely, as agreed upon by the parties. These services are primarily for drug discovery, chemical, manufacturing and controls cost and general and administrative support. Service charges recorded under this agreement were \$1.3 million for each of the years ended December 31, 2024 and 2023.

Under the Services Agreement, the Company has an option, exercisable through December 31, 2024, to enter into a collaborative services agreement with BioXcel LLC pursuant to which BioXcel LLC shall perform

product identification and related services for us utilizing EvolverAI. The Company agreed to pay BioXcel LLC \$18,000 per month, prorated for any partial month, as applicable, for the period beginning March 13, 2023 and ending December 31, 2024 as consideration for the option. The parties are obligated to negotiate the collaborative services agreement in good faith and to incorporate reasonable market-based terms, including consideration for BioXcel LLC reflecting a low, single-digit royalty on net sales and reasonable development and commercialization milestone payments, provided that (i) development milestones shall not exceed \$10 million in the aggregate and not be payable prior to proof of concept in humans and (ii) commercialization milestones shall be based on reaching annual net sales levels, be limited to 3% of the applicable net sales level, and not exceed \$30 million in the aggregate.

Director and Officer Indemnification and Insurance

We have agreed to indemnify each of our directors and executive officers against certain liabilities, costs and expenses, and have purchased directors' and officers' liability insurance.

STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS

Stockholders who intend to have a proposal considered for inclusion in our proxy materials for presentation at our annual meeting of stockholders to be held in 2026 (“2026 Annual Meeting”) pursuant to Rule 14a-8 under the Exchange Act must submit the proposal to our Corporate Secretary at our offices at 555 Long Wharf Drive, New Haven, CT 06511, in writing not later than July 15, 2026 unless the 2026 Annual Meeting is held prior to November 12, 2026 or after January 11, 2027, in which case the proposal must be submitted a reasonable time before the Company begins to print and send its proxy materials for the 2026 Annual Meeting.

Stockholders intending to present a proposal at our 2026 Annual Meeting, but not to include the proposal in our proxy statement, or to nominate a person for election as a director, must comply with the requirements set forth in our bylaws. Our bylaws require, among other things, that our Corporate Secretary receive written notice from the stockholder of record of their intent to present such proposal or nomination not earlier than the close of business on the 120th day and not later than the close of business on the 90th day prior to the anniversary of the preceding year’s annual meeting of stockholders. Therefore, we must receive notice of such a proposal or nomination for the 2026 Annual Meeting no earlier than the close of business on August 14, 2026 and no later than the close of business on September 13, 2026. The notice must contain the information required by our bylaws. In the event that the date of the 2024 Annual Meeting is more than 30 days before or more than 60 days after December 12, 2026, then our Corporate Secretary must receive such written notice not earlier than the close of business on the 120th day prior to the 2026 Annual Meeting and not later than the close of business of the 90th day prior to the 2026 Annual Meeting or, if later, the 10th day following the day on which public disclosure of the date of such meeting is first made by us. SEC rules permit management to vote proxies in its discretion in certain cases if the stockholder does not comply with this deadline and, in certain other cases notwithstanding the stockholder’s compliance with this deadline.

In addition to satisfying the foregoing requirements under our bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than our nominees for the 2026 Annual Meeting must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act.

We reserve the right to reject, rule out of order or take other appropriate action with respect to any proposal that does not comply with these or other applicable requirements.

In connection with our solicitation of proxies for our 2026 Annual Meeting, we intend to file a proxy statement and WHITE proxy card with the SEC. Stockholders may obtain our proxy statement (and any amendments and supplements thereto) and other documents as and when filed with the SEC without charge from the SEC’s website at: www.sec.gov.

HOUSEHOLDING

SEC rules permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements and notices with respect to two or more stockholders sharing the same address by delivering a single proxy statement or a single notice addressed to those stockholders. This process, which is commonly referred to as “householding,” provides cost savings for companies and helps the environment by conserving natural resources. Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, or if your household is receiving multiple copies of these documents and you wish to request that future deliveries be limited to a single copy, please notify your broker. You can also request prompt delivery of a copy of this Proxy Statement and the Annual Report by contacting the Broadridge Financial Solutions, Inc. at (866) 540-7095 or in writing at Broadridge, Householding Department, 51 Mercedes Way, Edgewood, New York 11717.

2024 ANNUAL REPORT

Our 2024 Annual Report, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, is being mailed with this Proxy Statement to those stockholders that receive this Proxy Statement in the mail. Stockholders can also access our 2024 Annual Report, including our Annual Report on Form 10-K for 2024, at www.proxyvote.com.

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2024 has also been filed with the SEC. It is available free of charge at the SEC's website at www.sec.gov. Upon written request by a stockholder, we will mail without charge a copy of our Annual Report on Form 10-K, including the financial statements and financial statement schedules, but excluding exhibits. Exhibits to the Annual Report on Form 10-K are available upon payment of a reasonable fee, which is limited to our expenses in furnishing the requested exhibit. All requests should be directed to the Corporate Secretary, BioXcel Therapeutics, Inc., 555 Long Wharf Drive, New Haven, CT 06511.

Your vote is important. Please promptly vote your shares by following the instructions for voting by completing, signing, dating and returning your proxy card or by Internet or telephone voting as described on your proxy card.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read 'J. Rodriguez', is positioned above the printed name of the Chief Legal Officer and Corporate Secretary.

Javier Rodriguez
Chief Legal Officer and Corporate Secretary

New Haven, CT
November 12, 2025

APPENDIX A

**CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED
OF
BIOXCEL THERAPEUTICS, INC.**

BIOXCEL THERAPEUTICS, INC. (the “*Corporation*”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “*DGCL*”), does hereby certify that:

FIRST: The name of the Corporation is BioXcel Therapeutics, Inc. and the date on which the Amended and Restated Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware was March 7, 2018 (the “*Certificate of Incorporation*”);

SECOND: The Board of Directors of the Corporation has duly adopted resolutions proposing and declaring advisable that the Certificate of Incorporation be amended as set forth herein and calling for the consideration and approval thereof at a meeting of the stockholders of the Corporation;

THIRD: The Certificate of Incorporation is hereby amended by deleting the Section 4.1(d) of ARTICLE FOURTH in its entirety and inserting the following in lieu thereof:

“Stock Split. That, effective as of 5:00 p.m., Eastern time, on the date this Certificate of Amendment to the Amended and Restated Certificate of Incorporation is filed with the Secretary of State of the State of Delaware (the “*Effective Time*”), each outstanding share (including shares held in treasury) of Common Stock of the Corporation (the “*Old Common Stock*”) shall be automatically combined, reclassified and converted into [•] shares of Common Stock (the “*New Common Stock*”). This stock split of the outstanding shares of Common Stock shall not affect the total number of shares of Common Stock that the Corporation is authorized to issue, which shall remain as set forth in the first sentence of this ARTICLE FOURTH. The reverse split of the Old Common Stock effected by the foregoing paragraph shall be referred to herein as the “*Reverse Split*.” The Reverse Split shall occur without any further action on the part of the Corporation or the holders of shares of Old Common Stock or New Common Stock and whether or not certificates representing such holders’ shares prior to the Reverse Split are surrendered for cancellation. No fractional interest in a share of New Common Stock shall be deliverable upon the Reverse Split. Stockholders who otherwise would have been entitled to receive any fractional interests in the New Common Stock, in lieu of receipt of such fractional interest, shall be entitled to receive from the Corporation an amount in cash equal to the fair value of such fractional interest as of the Effective Time. Except where the context otherwise requires, all references to “*Common Stock*” in this Certificate of Incorporation shall be to the New Common Stock. The Reverse Split will be effected on a stockholder-by-stockholder (as opposed to certificate-by-certificate) basis. Certificates or book-entries dated as of a date prior to the Effective Time representing outstanding shares of Old Common Stock shall, immediately after the Effective Time, represent a number of shares equal to the same number of shares of New Common Stock as is reflected on the face of such certificates or book entries, divided by [•] and rounded down to the nearest whole number. The Corporation may, but shall not be obliged to, issue new certificates evidencing the shares of New Common Stock outstanding as a result of the Reverse Split unless and until the certificates evidencing the shares held by a holder prior to the Reverse Split are either delivered to the Corporation or its transfer agent, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Every share number, dollar amount and other provision contained in this Amended and Restated Certificate of Incorporation have been adjusted for the Reverse Split, and there shall be no further adjustments made to such share numbers, dollar amounts or other provisions, except in the case of any stock splits, stock dividends, reclassifications and the like occurring after the Effective Time.”

FOURTH: Pursuant to a resolution of Board of Directors of the Corporation, this Certificate of Amendment was submitted to the stockholders of the Company for their approval, and was duly adopted in accordance with the provisions of Section 242 of the DGCL.

FIFTH: This Certificate of Amendment to the Certificate of Incorporation shall have an Effective Time of [•] at 5:00 p.m. Eastern Time.

IN WITNESS WHEREOF, BioXcel Therapeutics, Inc. has caused this Certificate of Amendment to be executed by its duly authorized officer on this [•] day of [•], [•].

BIOXCEL THERAPEUTICS, INC.

By: _____

Name: _____

Title: _____

BIOXCCEL THERAPEUTICS, INC.
555 LONG WHARF DRIVE
NEW HAVEN, CT 06511



VOTE BY INTERNET
Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. Eastern Time on December 11, 2025. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/BTAI2025

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Before The Meeting - Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 P.M. Eastern Time on December 11, 2025. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Before The Meeting - Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V80912-P38004

KEEP THIS PORTION FOR YOUR RECORDS

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

DETACH AND RETURN THIS PORTION ONLY

BIOXCCEL THERAPEUTICS, INC.		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.	┌ └
The Board of Directors recommends you vote FOR the following:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	
1. Election of Class I Directors						
Nominees:						
01) June Bray						
02) Sandeep Laumas, M.D.						
03) David Mack						
The Board of Directors recommends you vote FOR proposals 2, 3, 4 and 5.						For
2. Ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for 2025.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Against
3. Approval, on an advisory (non-binding) basis, of the compensation of the Company's named executive officers ("Say-on-Pay Vote").		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Abstain
4. Approval of an amendment to our Amended and Restated Certificate of Incorporation, as amended to effect, within 12 months following the date of stockholder approval and solely if the Board determines that it is necessary and advisable to regain compliance with the minimum bid price requirements of the Nasdaq Capital Market, a reverse stock split at a ratio of not less than 1-for-2 and not greater than 1-for-20, with the exact ratio to be set within that range by the Company's Board of Directors.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Approval of an adjournment of the Annual Meeting, if necessary, to solicit additional proxies if there are not sufficient votes at the time of the Annual Meeting to approve Proposal 4.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NOTE: Such other business as may properly come before the meeting or any continuation, postponement or adjournment thereof.						
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.						
<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>		<input style="width: 95%;" type="text"/>		
Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)		Date		

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement and Annual Report are available at www.proxyvote.com.

V80913-P38004

**BIOXCEL THERAPEUTICS, INC.
Annual Meeting of Stockholders
December 12, 2025, 9:00 a.m., Eastern Time
This proxy is solicited by the Board of Directors**

The stockholder(s) hereby appoint(s) Vimal Mehta, Ph.D., Richard Steinhart and Javier Rodriguez, or each of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of BIOXCEL THERAPEUTICS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 9:00 a.m., Eastern Time on December 12, 2025, live via webcast at www.virtualshareholdermeeting.com/BTAI2025, and any continuation, adjournment or postponement thereof, with all powers which the undersigned would possess if present at the meeting.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations, as indicated on the reverse side, and in the discretion of the proxies with respect to such other matters as may properly come before the Annual Meeting.

Continued and to be signed on reverse side