

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

**FORM S-8**  
**REGISTRATION STATEMENT**  
**UNDER**  
**THE SECURITIES ACT OF 1933**

**BioXcel Therapeutics, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of incorporation or organization)

**82-1386754**  
(I.R.S. Employer Identification No.)

555 Long Wharf Drive  
New Haven, CT 06511  
(475) 238-6837  
(Address of Principal Executive Offices, including Zip Code)

**BioXcel Therapeutics, Inc. 2020 Incentive Award Plan**  
**BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan**  
(Full title of the plans)

**Vimal Mehta, Ph.D.**  
**Chief Executive Officer**  
**BioXcel Therapeutics, Inc.**  
555 Long Wharf Drive  
New Haven, CT 06511  
(475) 238-6837  
(Name, address and telephone number, including area code, of agent for service)

**With copies to:**  
**Peter N. Handrinis**  
**Keith L. Halverstam**  
**Latham & Watkins LLP**  
200 Clarendon Street  
Boston, MA 02116  
(617) 948-6060

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer o      Accelerated filer o      Non-accelerated filer x      Smaller reporting company x      Emerging growth company x

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. x

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Name of Plan	Amount to be Registered (1)	Proposed Maximum Aggregate Offering Price per Share (4)	Proposed Maximum Aggregate Offering Price (4)	Amount of Registration Fee (4)
Common Stock, par value \$0.001 per share	BioXcel Therapeutics, Inc. 2020 Incentive Award Plan	5,679,305(2)	\$43.57	\$247,447,318.85	\$32,118.66
Common Stock, par value \$0.001 per share	BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan	504,226(3)	\$43.57	\$21,969,126.82	\$2,851.59

- (1) Pursuant to Rule 416 of the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover any additional shares of common stock, par value \$0.001 per share (“Common Stock”) of BioXcel Therapeutics, Inc. (the “Registrant”) that become issuable under the BioXcel Therapeutics, Inc. 2020 Incentive Award Plan (the “2020 Plan”) or the BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan (the “ESPP”) by reason of any future stock dividend, stock split, recapitalization or other similar transaction or to cover such additional shares as may hereinafter be offered or issued to prevent dilution.
- (2) Represents shares of Common Stock available for future issuance under the 2020 Plan, which amount consists of (a) 911,000 shares initially available under the 2020 Plan, (b) 231,941 shares of Common Stock that remained available for issuance under the BioXcel Therapeutics, Inc. 2017 Incentive Award Plan (the “2017 Plan”) immediately prior to the approval of the 2020 Plan by the Company’s stockholders, (c) up to 2,919,460 shares of Common Stock underlying outstanding awards granted under the 2017 Plan that are forfeited or lapse unexercised and not issued under the 2017 Plan and (d) an additional 1,616,904 shares of Common Stock that may become issuable under the 2020 Plan pursuant to its terms.
- (3) Represents shares of Common Stock available for future issuance under the ESPP, which amount consists of (a) 100,000 shares initially available under the ESPP and (b) an additional 404,226 shares of Common Stock that may become issuable under the ESPP pursuant to its terms.
- (4) Calculated solely for purposes of computing the registration fee for this offering. Pursuant to Rule 457(c) and Rule 457(h) of the Securities Act, the Proposed Maximum Offering Price, the Proposed Maximum Aggregate Offering Price and the Amount of the Registration Fee are based upon the average of the high and low prices per share of Common Stock as reported on The Nasdaq Capital Market on May 14, 2020.

## PART I

### INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information called for in Part I of Form S-8 is not being filed with or included in this Registration Statement (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission").

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### **Item 3. Incorporation of Documents by Reference.**

The following documents, which have been filed by the Registrant with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

- (1) [the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2019](#);
- (2) [the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020](#);
- (3) the Registrant's Current Reports on Form 8-K filed with the Commission on [February 19, 2020](#), [February 21, 2020](#), [April 15, 2020](#) and [May 21, 2020](#) (except for any portions of such Current Reports on Form 8-K furnished pursuant to Item 2.02 and/or Item 7.01 thereof and any corresponding exhibits thereto not filed with the Commission); and
- (4) The Registrant's Registration Statement on [Form 8-A filed with the Commission on March 5, 2018](#) pursuant to Section 12(b) of the Securities Act, relating to the Registrant's Common Stock, as updated by "Description of Registrant's Securities Registered under Section 12 of the Exchange Act" filed as Exhibit 4.1 to the Registrant's [Annual Report on Form 10-K for the fiscal year ended December 31, 2019](#), and any amendment or report filed for the purpose of updating such description.

All reports and other documents filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date hereof (except for any portions of the Registrant's Current Reports on Form 8-K furnished pursuant to Item 2.02 and/or Item 7.01 thereof and any corresponding exhibits thereto not filed with the Commission) and prior to the filing of a post-effective amendment to this Registration Statement, which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents or reports.

Any statement contained in this Registration Statement, in an amendment hereto or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed amendment to this Registration Statement or in any document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement, except as to specific section of such statements as set forth therein.

Under no circumstances shall any information furnished under Item 2.02 and/or Item 7.01 of Current Report on Form 8-K and any corresponding exhibits thereto be deemed incorporated herein by reference unless such Current Report on Form 8-K expressly provides to the contrary.

#### **Item 4. Description of Securities.**

Not applicable.

#### **Item 5. Interests of Named Experts and Counsel.**

Not applicable.

**Item 6. Indemnification of Directors and Officers.**

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's amended and restated certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware (the "DGCL") prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would otherwise have the power to indemnify him or her under Section 145.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws provide for indemnification and advancement of expenses to its directors and officers to the fullest extent permitted by the DGCL. The Registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. The Registrant's amended and restated certificate of incorporation and amended and restated bylaws provide that the Registrant will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the Registrant to procure a judgment in the Registrant's favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or

proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by the Registrant against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into separate indemnification agreements with each of its directors and executive officers. Each indemnification agreement provides, among other things, for indemnification to the fullest extent permitted by law and the Registrant's amended and restated certificate of incorporation and amended and restated bylaws any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to the Registrant if it is found that such indemnitee is not entitled to such indemnification under applicable law and Registrant's amended and restated certificate of incorporation and amended and restated bylaws.

The Registrant maintains a general liability insurance policy that covers certain liabilities of its directors and officers arising out of claims based on acts or omissions in their capacities as the Registrant's directors or officers.

**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

<u>Exhibit No.</u>	<u>Description</u>	<u>Form</u>	<u>File No.</u>	<u>Exhibit</u>	<u>Filing Date</u>	<u>Filed Herewith</u>
4.1	<a href="#">Amended and Restated Certificate of Incorporation.</a>	8-K	001-38410	3.1	03/13/2018	
4.2	<a href="#">Amended and Restated Bylaws.</a>	8-K	001-38410	3.2	03/13/2018	
4.3	<a href="#">Specimen Stock Certificate evidencing the shares of common stock.</a>	S-1/A	333-22990	4.2	02/26/2018	
5.1	<a href="#">Opinion of Latham &amp; Watkins LLP.</a>					*
23.1	<a href="#">Consent of BDO USA, LLP, independent registered public accounting firm for BioXcel Therapeutics, Inc.</a>					*
23.2	<a href="#">Consent of Latham &amp; Watkins LLP (included in Exhibit 5.1).</a>					*
24.1	<a href="#">Power of Attorney (included on the signature page of the Registration Statement).</a>					*
99.1	<a href="#">BioXcel Therapeutics, Inc. 2020 Incentive Award Plan.</a>	8-K	001-38410	10.1	05/21/2020	
99.2	<a href="#">BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan.</a>	8-K	001-38410	10.2	05/21/2020	

**Item 9. Undertakings.**

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

*provided, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) shall not apply if the registration statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New Haven, State of Connecticut, on this 21st day of May 2020.

### BIOXCEL THERAPEUTICS, INC.

By: /s/ Vimal Mehta  
Vimal Mehta  
Chief Executive Officer, President, Secretary and Director

### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Vimal Mehta and Richard Steinhart, and each of them, with full power to act without the other, such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign this Registration Statement, and any and all amendments thereto (including post-effective amendments), and to file the same, with exhibits and schedules thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing necessary or desirable to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Vimal Mehta, Ph.D.</u> Vimal Mehta, Ph.D.	Chief Executive Officer, President, Secretary, and Director <i>(principal executive officer)</i>	May 21, 2020
<u>/s/ Richard Steinhart</u> Richard Steinhart	Chief Financial Officer <i>(principal financial officer and principal accounting officer)</i>	May 21, 2020
<u>/s/ Peter Mueller, Ph.D.</u> Peter Mueller, Ph.D.	Chairman of the Board of Directors	May 21, 2020
<u>/s/ Sandeep Laumas, M.D.</u> Sandeep Laumas, M.D.	Director	May 21, 2020
<u>/s/ Krishnan Nandabalan, Ph.D.</u> Krishnan Nandabalan, Ph.D.	Director	May 21, 2020
<u>/s/ Michal Votruba, M.D., Ph.D.</u> Michal Votruba, M.D., Ph.D.	Director	May 21, 2020

*Signature page to S-8 Registration Statement*

53rd at Third  
 885 Third Avenue  
 New York, New York 10022-4834  
 Tel: +1.212.906.1200 Fax: +1.212.751.4864  
 www.lw.com

## LATHAM & WATKINS LLP

### FIRM / AFFILIATE OFFICES

Beijing	Moscow
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London	Singapore
Los Angeles	Tokyo
Madrid	Washington, D.C.
Milan	

May 21, 2020

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

Re: Registration Statement on Form S-8; 6,183,531 shares of common stock, par value \$0.001 per share, of BioXcel Therapeutics, Inc.

Ladies and Gentlemen:

We have acted as special counsel to BioXcel Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the registration by the Company of 5,679,305 shares (the "Plan Shares") of its common stock, \$0.001 par value per share (the "Common Stock"), issuable under the BioXcel Therapeutics, Inc. 2020 Incentive Award Plan (the "Plan") and 504,226 shares (the "ESPP Shares" and, together with the Plan Shares, the "Shares") of Common Stock issuable under the BioXcel Therapeutics, Inc. 2020 Employee Stock Purchase Plan (the "ESPP"). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on May 21, 2020 (the "Registration Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the related prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the "DGCL") and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the recipients thereof, and have been issued by the Company against payment therefor in the circumstances contemplated by and pursuant to the Plan and the ESPP, and assuming in each case that the individual issuances, grants or awards under

the Plan or the ESPP, as applicable, are duly authorized by all necessary corporate action and duly issued, granted or awarded and exercised in accordance with the requirements of law and the Plan or the ESPP (and the agreements and awards duly adopted thereunder and in accordance therewith), as applicable, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares in the DGCL.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP



Consent of Independent Registered Public Accounting Firm

The Board of Directors  
BioXcel Therapeutics, Inc.  
New Haven, CT 06511

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 of our report dated March 9, 2020, relating to the financial statements of BioXcel Therapeutics, Inc. (the "Company"), appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ BDO USA, LLP  
BDO USA, LLP  
Stamford, Connecticut

May 21, 2020

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