

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported) **September 26, 2019**

BioXcel Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

001-38410
(Commission File Number)

82-1386754
(IRS Employer
Identification No.)

**555 Long Wharf Drive
New Haven, CT 06511**
(Address of principal executive offices, including Zip Code)

(475) 238-6837
(Registrant's telephone number, including area code)

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.001	BTAI	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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 13(a) of the Exchange Act. x

Item 8.01 Other Events.

On September 26, 2019, BioXcel Therapeutics, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with BMO Capital Markets Corp., as representative of the several underwriters named therein (collectively, the “Underwriters”), in connection with the issuance and sale by the Company in a public offering of 2,303,030 shares of the Company’s common stock at a public offering price of \$8.25 per share, less underwriting discounts and commissions, pursuant to an effective shelf registration statement on Form S-3 (Registration No. 333-230674) and a related prospectus supplement filed with the Securities and Exchange Commission (the “SEC”). Under the terms of the Underwriting Agreement, the Company has also granted the Underwriters an option exercisable for 30 days to purchase up to an additional 345,454 shares of its common stock at the public offering price, less underwriting discounts and commissions. The closing of the offering is expected to occur on or about September 30, 2019, subject to the satisfaction of customary closing conditions.

The Company expects to receive net proceeds from the offering of approximately \$17.7 million, or approximately \$20.3 million if the Underwriters exercise their option to purchase additional shares in full, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. The Company intends to use the net proceeds of this offering for general corporate purposes, which may include development and commercialization of their product candidates, research and development, general and administrative expenses, license or technology acquisitions, and working capital and capital expenditures.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions.

The foregoing description of the Underwriting Agreement is not complete and is qualified in its entirety by reference to the full text of the Underwriting Agreement, a copy of which is filed as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated by reference herein.

Latham & Watkins LLP, counsel to the Company, has issued an opinion to the Company, dated September 27, 2019, regarding the validity of the ordinary shares to be issued and sold in the offering. A copy of the opinion is filed as Exhibit 5.1 to this Current Report on Form 8-K.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
1.1	<u>Underwriting Agreement, dated September 26, 2019, between the Company and BMO Capital Markets Corp., as representative of the underwriters named therein</u>
5.1	<u>Opinion of Latham & Watkins LLP</u>

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: September 27, 2019

BIOXCEL THERAPEUTICS, INC.

/s/ Richard Steinhart
Richard Steinhart
Chief Financial Officer

2,303,030 Shares of Common Stock

BIOXCEL THERAPEUTICS, INC.

UNDERWRITING AGREEMENT

September 26, 2019

BMO CAPITAL MARKETS CORP.,
As Representative of the several
Underwriters named in Schedule I attached hereto,

c/o BMO Capital Markets Corp.
3 Times Square, 25th Floor
New York, New York 10036

Ladies and Gentlemen:

BioXcel Therapeutics, Inc., a Delaware corporation (the “**Company**”), proposes to sell 2,303,030 shares (the “**Firm Stock**”) of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”). In addition, the Company proposes to grant to the underwriters named in Schedule I (the “**Underwriters**”) attached to this agreement (this “**Agreement**”) an option to purchase up to 345,454 additional shares of the Common Stock on the terms set forth in Section 2 (the “**Option Stock**”). The Firm Stock and the Option Stock, if purchased, are hereinafter collectively called the “**Stock**”. This Agreement is to confirm the agreement concerning the purchase of the Stock from the Company by the Underwriters.

1. *Representations, Warranties and Agreements of the Company.* The Company represents, warrants and agrees that:

(a) A registration statement on Form S-3 (File No. 333-230674) relating to the Stock has (i) been prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the “**Securities Act**”), and the rules and regulations of the Securities and Exchange Commission (the “**Commission**”) thereunder; (ii) been filed with the Commission under the Securities Act; and (iii) become effective under the Securities Act. Copies of such registration statement and any amendment thereto have been delivered by the Company to you as the representative (the “**Representative**”) of the Underwriters. As used in this Agreement:

- (i) “**Applicable Time**” means 8:15 A.M. (New York City time) on September 26, 2019;
 - (ii) “**Effective Date**” means the date and time at which the Registration Statement, or the most recent post-effective amendment thereto, was declared effective by the Commission;
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(iii) “**Issuer Free Writing Prospectus**” means each “issuer free writing prospectus” (as defined in Rule 433 under the Securities Act);

(iv) “**Preliminary Prospectus**” means any preliminary prospectus relating to the Stock included in such registration statement or filed with the Commission pursuant to Rule 424(b) under the Securities Act;

(v) “**Pricing Disclosure Package**” means, as of the Applicable Time, the most recent Preliminary Prospectus, together with the information included in Schedule III hereto and each Issuer Free Writing Prospectus filed or used by the Company at or before the Applicable Time, other than a road show that is an Issuer Free Writing Prospectus but is not required to be filed under Rule 433 under the Securities Act;

(vi) “**Prospectus**” means the final prospectus relating to the Stock, as filed with the Commission pursuant to Rule 424(b) under the Securities Act;

(vii) “**Registration Statement**” means the registration statement, as amended as of the Effective Date, relating to the offer and sale of the Stock, including any Preliminary Prospectus or the Prospectus, all exhibits to such registration statement and including the information deemed by virtue of Rule 430A under the Securities Act to be part of such registration statement as of the Effective Date;

(viii) “**Testing-the-Waters Communication**” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act; and

(ix) “**Written Testing-the-Waters Communication**” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

Any reference to any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any documents incorporated by reference therein pursuant to Form S-3 under the Securities Act as of the date of such Preliminary Prospectus or the Prospectus, as the case may be. Any reference to the “**most recent Preliminary Prospectus**” shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement or filed pursuant to Rule 424(b) under the Securities Act prior to or on the date hereof. Any reference to any amendment or supplement to any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any document filed under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), after the date of such Preliminary Prospectus or the Prospectus, as the case may be, and before the date of such amendment or supplement and incorporated by reference in such Preliminary Prospectus or the Prospectus, as the case may be; and any reference to any amendment to the Registration Statement shall be deemed to include any document filed with the Commission pursuant to Section 13(a), 14 or 15(d) of the Exchange Act after the Effective Date and before the date of such amendment that is incorporated by reference in

the Registration Statement. Any reference herein to the term “Registration Statement” shall be deemed to include the abbreviated registration statement to register additional shares of Common Stock under Rule 462(b) under the Securities Act (the “**Rule 462(b) Registration Statement**”). The Commission has not issued any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus or suspending the effectiveness of the Registration Statement, and no proceeding or examination for such purpose has been instituted or threatened by the Commission. The Commission has not notified the Company of any objection to the use of the form of the Registration Statement or any post-effective amendment thereto.

(b) From the time of initial filing of the Registration Statement to the Commission through the date hereof, the Company has been and will be an “emerging growth company,” as defined in Section 2(a) of the Securities Act (an “**Emerging Growth Company**”).

(c) The Company (i) has not engaged in any Testing-the-Waters Communication and (ii) has not authorized anyone to engage in Testing-the-Waters Communications.

(d) The Company was not at the time of initial filing of the Registration Statement and at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Stock, is not on the date hereof and will not be on the applicable Delivery Date, an “ineligible issuer” (as defined in Rule 405 under the Securities Act).

(e) Since the time of initial filing of the Registration Statement, the Company has been, and continues to be, eligible to use Form S-3 for the offering of the Stock. The Company was not an “ineligible issuer” (as defined in Rule 405) at any such time or date.

(f) The Registration Statement conformed and will conform in all material respects on the Effective Date and on the applicable Delivery Date, and any amendment to the Registration Statement filed after the date hereof will conform in all material respects when filed, to the requirements of the Securities Act and the rules and regulations thereunder. The most recent Preliminary Prospectus conformed, and the Prospectus will conform, in all material respects when filed with the Commission pursuant to Rule 424(b) under the Securities Act and on the applicable Delivery Date to the requirements of the Securities Act and the rules and regulations thereunder. The documents incorporated by reference in any Preliminary Prospectus or the Prospectus conformed, and any further documents so incorporated will conform, when filed with the Commission, in all material respects to the requirements of the Exchange Act or the Securities Act, as applicable, and the rules and regulations of the Commission thereunder.

(g) The Registration Statement did not, as of the Effective Date, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Registration Statement in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(h) The Prospectus will not, as of its date or as of the applicable Delivery Date, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Prospectus in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(i) The documents incorporated by reference in any Preliminary Prospectus or the Prospectus did not, and any further documents filed and incorporated by reference therein will not, when filed with the Commission, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(j) The Pricing Disclosure Package did not, as of the Applicable Time, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Pricing Disclosure Package in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(k) Each Issuer Free Writing Prospectus listed in Schedule IV hereto, when taken together with the Pricing Disclosure Package, did not, as of the Applicable Time, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from such Issuer Free Writing Prospectus listed in Schedule IV hereto in reliance upon and in conformity with written information furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(l) Each Issuer Free Writing Prospectus conformed or will conform in all material respects to the requirements of the Securities Act and the rules and regulations thereunder on the date of first use, and the Company has complied with all prospectus delivery and any filing requirements applicable to such Issuer Free Writing Prospectus pursuant to the Securities Act and rules and regulations thereunder. The Company has not made any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus without the prior written consent of the Representative, except as set forth on Schedule V hereto. The Company has retained in accordance with the Securities Act and the rules and regulations thereunder all Issuer Free Writing Prospectuses that were not required to be filed pursuant to the Securities Act and the rules and regulations thereunder.

(m) The Company has been duly organized, is validly existing and in good standing as a corporation or other business entity under the laws of its jurisdiction of organization and is duly qualified to do business and in good standing as a foreign corporation or other business entity in each jurisdiction in which its ownership or lease of property or the conduct of its businesses

requires such qualification, except where the failure to be so qualified or in good standing (i) could not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the condition (financial or otherwise), results of operations, stockholders' equity, properties, business or prospects of the Company taken as a whole or (ii) impair in any material respect the ability of the Company to perform its obligations under this Agreement or to consummate any transactions contemplated by this Agreement, the Pricing Disclosure Package or the Prospectus (any such effect as described in clauses (i) or (ii), a "**Material Adverse Effect**"). The Company has all power and authority necessary to own or hold its properties and to conduct the businesses in which it is engaged. The Company does not own or control, directly or indirectly, any corporation, association or other entity.

(n) The Company has an authorized capitalization as set forth or incorporated by reference in each of the most recent Preliminary Prospectus and the Prospectus, and all of the issued shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and non-assessable, conform in all material respects to the description thereof contained in the most recent Preliminary Prospectus and were issued in compliance with federal and state securities laws and not in violation of any preemptive right, resale right, right of first refusal or similar right. All of the Company's options, warrants and other rights to purchase or exchange any securities for shares of the Company's capital stock have been duly authorized and validly issued, conform to the description thereof contained in the most recent Preliminary Prospectus and were issued in compliance with federal and state securities laws.

(o) The shares of the Stock to be issued and sold by the Company to the Underwriters hereunder have been duly authorized and, upon payment and delivery in accordance with this Agreement, will be validly issued, fully paid and non-assessable, will conform to the description thereof contained in the most recent Preliminary Prospectus, will be issued in compliance with federal and state securities laws and will be free of statutory and contractual preemptive rights, rights of first refusal and similar rights.

(p) The Company has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement. This Agreement has been duly and validly authorized, executed and delivered by the Company.

(q) The issue and sale of the Stock, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby and the application of the proceeds from the sale of the Stock as described under "Use of Proceeds" in the most recent Preliminary Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, impose any lien, charge or encumbrance upon any property or assets of the Company, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement, license, lease or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject; (ii) result in any violation of the provisions of the charter or by-laws (or similar organizational documents) of the Company; or (iii) result in any violation of any statute or any judgment, order, decree, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties or assets, except, with respect to clauses (i) and (iii), conflicts, breaches, violations, or defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(r) No consent, approval, authorization or order of, or filing, registration or qualification with, any court or governmental agency or body having jurisdiction over the Company or any of its properties or assets is required for the issue and sale of the Stock, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby, the application of the proceeds from the sale of the Stock as described under “Use of Proceeds” in the most recent Preliminary Prospectus, except for (i) the registration of the Stock under the Securities Act and such consents, approvals, authorizations, orders, filings, registrations or qualifications as may be required under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and applicable state and foreign securities laws and/or the bylaws and rules of the Financial Industry Regulatory Authority, Inc. (“**FINRA**”) in connection with the purchase and sale of the Stock by the Underwriters and (ii) such consents, approvals, authorizations, orders, filings, registrations or qualifications that, if not obtained, have not or would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(s) The historical financial statements (including the related notes and supporting schedules) included or incorporated by reference in the most recent Preliminary Prospectus comply as to form in all material respects with the requirements of Regulation S-X under the Securities Act and present fairly the financial condition, results of operations and cash flows of the entities purported to be shown thereby at the dates and for the periods indicated and have been prepared in conformity with accounting principles generally accepted in the United States applied on a consistent basis throughout the periods involved.

(t) BDO USA, LLP, who has certified certain financial statements of the Company, whose report appears or is incorporated by reference in the most recent Preliminary Prospectus and who have delivered the initial letter referred to in Section 7(g) hereof, are independent public accountants as required by the Securities Act and the rules and regulations thereunder.

(u) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed by, or under the supervision of, the Company’s principal executive and principal financial officers, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States. The Company maintains internal accounting controls sufficient to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorization, (ii) transactions are recorded as necessary to permit preparation of the Company’s financial statements in conformity with accounting principles generally accepted in the United States and to maintain accountability for its assets, (iii) access to the Company’s assets is permitted only in accordance with management’s general or specific authorization, (iv) the recorded accountability for the Company’s assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Prospectus and the Pricing Disclosure Package fairly present the information called for in all

material respects and are prepared in accordance with the Commission's rules and guidelines applicable thereto. As of the date of the most recent balance sheet of the Company reviewed or audited by BDO USA, LLP and the audit committee of the board of directors of the Company (the "**Audit Committee**"), there were no material weaknesses in the Company's internal controls.

(v) (i) The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act), (ii) such disclosure controls and procedures are designed to ensure that the information required to be disclosed by the Company and its subsidiaries in the reports they file or submit under the Exchange Act is accumulated and communicated to management of the Company, including its principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure to be made, and (iii) such disclosure controls and procedures are effective in all material respects to perform the functions for which they were established.

(w) Since the date of the most recent balance sheet of the Company reviewed or audited by BDO USA, LLP and the Audit Committee, (i) the Company has not been advised of or become aware of (A) any significant deficiencies in the design or operation of internal controls that could adversely affect the ability of the Company to record, process, summarize and report financial data, or any material weaknesses in internal controls, or (B) any fraud, whether or not material, that involves management or other employees who have a significant role in the internal controls of the Company; and (ii) there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

(x) The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies" set forth or incorporated by reference in the most recent Preliminary Prospectus accurately and fully describes (i) the accounting policies that the Company believes are the most important in the portrayal of the Company's financial condition and results of operations and that require management's most difficult, subjective or complex judgments ("**Critical Accounting Policies**"); (ii) the judgments and uncertainties affecting the application of Critical Accounting Policies; and (iii) the likelihood that materially different amounts would be reported under different conditions or using different assumptions and an explanation thereof.

(y) There is and has been no failure on the part of the Company and any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith applicable to the Company or its directors or officers.

(z) Since the date of the latest audited financial statements included or incorporated by reference in the most recent Preliminary Prospectus, the Company has not (i) sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, (ii) issued or granted any securities, (iii) incurred any material liability or material obligation, direct or contingent, other than liabilities and obligations that were incurred in the ordinary course of business, (iv) entered into any material transaction not in the ordinary course of business, or (v) declared or paid any dividend on its capital stock, and since such date, there has

not been any change in the capital stock or long-term debt of the Company or any adverse change, or any development involving a prospective adverse change, in or affecting the condition (financial or otherwise), results of operations, stockholders' equity, properties, management, business or prospects of the Company taken as a whole, in each case except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(aa) The Company has good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them, in each case free and clear of all liens, encumbrances and defects, except such liens, encumbrances and defects as are described in the most recent Preliminary Prospectus or such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company. All assets held under lease by the Company are held by them under valid, subsisting and enforceable leases, with such exceptions as do not materially interfere with the use made and proposed to be made of such assets by the Company.

(bb) The Company possesses such permits, certificates licenses, franchises, clearances, registrations, exemptions, certificates of need and other approvals or authorizations of governmental or regulatory authorities as are necessary under applicable law to own their properties and conduct their businesses in the manner described in the most recent Preliminary Prospectus (collectively, "**Permits**"), including without limitation, all such Permits required by the United States Food and Drug Administration ("**FDA**") or any component thereof and/or by any other U.S., state, local or foreign government or drug regulatory agency (collectively, the "**Regulatory Agencies**"), except where failure to so possess would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. All of the Permits are valid and in full force and effect, except when the invalidity of such Permits or the failure of such Governmental Licenses to be in full force and effect would not, individually or in the aggregate, result in a Material Adverse Effect. The Company has fulfilled and performed all of its respective obligations with respect to the Permits, and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other impairment of the rights of the holder or any such Permits, except for any of the foregoing that could not reasonably be expected to have a Material Adverse Effect. The Company has not received notice of proceedings relating to any revocation or modification of any such Permits or has any reason to believe that any such Permits will not be renewed in the ordinary course.

(cc) To the Company's knowledge, the Company owns or possesses, or can acquire on reasonable terms, adequate rights to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, copyrights, licenses, know-how, software, systems and technology (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) (collectively, "**Intellectual Property Rights**") necessary for or material to the conduct of its business now conducted or proposed in the Registration Statement, the Prospectus or the Pricing Disclosure Package to be conducted, and has no reason to believe that the conduct of its business will conflict with, and have not received any notice of any claim of conflict with, any such rights of others. The expected expiration of any such Intellectual Property Rights would not, individually or in the aggregate, have a Material Adverse Effect. To the knowledge of the Company, none of the Intellectual Property Rights owned by the Company are invalid or unenforceable, in whole or in part, and the Company is unaware of any facts that would form a reasonable basis for such a

determination. To the knowledge of the Company, there are no unreleased liens or security interests which have been filed against any of the Intellectual Property Rights owned by or licensed to the Company. Except as disclosed in the Registration Statement, the Prospectus or the Pricing Disclosure Package (i) the Company is not obligated to pay a material royalty, grant a license or provide other material consideration to any third party in connection with the Intellectual Property Rights owned by or licensed to the Company; (ii) to the Company's knowledge, there are no rights of third parties to any of the Intellectual Property Rights owned by or licensed to the Company, in any field of use, other than the respective licensor to the Company of such Intellectual Property Rights; (iii) to the Company's knowledge, there is no material infringement, misappropriation breach, default or other violation, or the occurrence of any event that with notice or the passage of time would constitute any of the foregoing, by the Company, or third parties of any of the Intellectual Property Rights owned by or licensed to the Company; (iv) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others (a) challenging the Company's rights in or to, or the violation of any of the terms of, any of their Intellectual Property Rights; (b) challenging the validity, enforceability or scope of any such Intellectual Property Rights; or (c) that alleges the Company infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property Rights or other proprietary rights of others, and, in each case, the Company is unaware of any facts which would form a reasonable basis for any such claim; (v) none of the Intellectual Property Rights owned by or licensed to the Company in its business has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company; and (vi) to the Company's knowledge, no employee of the Company is in or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or actions undertaken by the employee while employed with the Company. To the knowledge of the Company, (1) neither the commercial development nor the sale of any of the proposed products or processes of the Company, as described in the Registration Statement, the Prospectus or the Pricing Disclosure Package infringes, misappropriates or otherwise violates, or would, upon the commercialization of such proposed products or processes, infringe, misappropriate or otherwise violate, any Intellectual Property Rights of any third party; and (2) each current and former employee and consultant of the Company (a) has executed an inventions assignment and confidentiality agreement with the Company, on or about the respective date of hire, and signed copies of such agreements have been made available to the Representative and its counsel; and (b) has signed or agreed to assign to the Company any and all Intellectual Property Rights he or she may possess or may have possessed that are related to the Company's business, as currently conducted and as proposed to be conducted, as described in the Registration Statement, the Prospectus or the Pricing Disclosure Package. All patent applications owned by or licensed to the Company or under which the Company has rights have, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the U.S. Patent and Trademark Office (the "**USPTO**") in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or could

form the basis of a finding of invalidity with respect to any patents that may be issued with respect to such applications.

(dd) There are no legal or governmental proceedings pending to which the Company is a party or of which any property or assets of the Company is the subject that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect or could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on the performance of this Agreement or the consummation of the transactions contemplated hereby; and to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or others.

(ee) There are no contracts or other documents required to be described in the Registration Statement or the most recent Preliminary Prospectus or filed as exhibits to the Registration Statement, that are not described and filed as required. The statements made in the most recent Preliminary Prospectus, insofar as they purport to constitute summaries of the terms of the contracts and other documents described and filed, constitute accurate summaries of the terms of such contracts and documents in all material respects. The Company has no knowledge that any other party to any such contract or other document has any intention not to render full performance as contemplated by the terms thereof.

(ff) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, the Company carries, or is covered by, insurance from insurers of recognized financial responsibility in such amounts and covering such risks as is adequate for the conduct of its business and the value of their respective properties and as is customary for companies engaged in similar businesses in similar industries. All policies of insurance of the Company are in full force and effect; the Company is in compliance with the terms of such policies in all material respects; and the Company has not received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance; there are no claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that could not reasonably be expected to have a Material Adverse Effect.

(gg) No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, that is required to be described in the most recent Preliminary Prospectus which is not so described.

(hh) No labor disturbance by or dispute with the employees of the Company exists or, to the knowledge of the Company, is imminent that could reasonably be expected to have a Material Adverse Effect.

(ii) The Company (i) is not in violation of its charter or by-laws (or similar organizational documents), (ii) is not in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of

any term, covenant, condition or other obligation contained in any indenture, mortgage, deed of trust, loan agreement, license or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject, (iii) is not in violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over it or its property or assets or (iv) has not failed to obtain any license, permit, certificate, franchise or other governmental authorization or permit necessary to the ownership of its property or to the conduct of its business, except in the case of clauses (ii), (iii) and (iv), to the extent any such conflict, breach, violation or default could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(jj) The Company (i) is, and at all times prior hereto was, in compliance with all laws, regulations, ordinances, rules, orders, judgments, decrees, permits or other legal requirements of any governmental authority, including without limitation any international, foreign, national, state, provincial, regional, or local authority, relating to pollution, the protection of human health or safety, the environment, or natural resources, or to use, handling, storage, manufacturing, transportation, treatment, discharge, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants (“**Environmental Laws**”) applicable to such entity, which compliance includes, without limitation, obtaining, maintaining and complying with all permits and authorizations and approvals required by Environmental Laws to conduct their respective businesses, and (ii) has not received notice or otherwise have knowledge of any actual or alleged violation of Environmental Laws, or of any actual or potential liability for or other obligation concerning the presence, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except in the case of clause (i) or (ii) where such non-compliance, violation, liability, or other obligation could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Except as described in the most recent Preliminary Prospectus, (x) there are no proceedings that are pending, or known to be contemplated, against the Company under Environmental Laws in which a governmental authority is also a party, other than such proceedings regarding which it is reasonably believed no monetary sanctions of \$100,000 or more will be imposed, (y) the Company is not aware of any issues regarding compliance with Environmental Laws, including any pending or proposed Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company, and (z) the Company does not anticipate material capital expenditures relating to Environmental Laws.

(kk) The Company has filed all federal, state, local and foreign tax returns required to be filed through the date hereof, subject to permitted extensions, and have paid all taxes due, and no tax deficiency has been determined adversely to the Company, nor does the Company have any knowledge of any tax deficiencies that have been, or could reasonably be expected to be asserted against the Company, that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(ll) (i) Each “employee benefit plan” (within the meaning of Section 3(3) of the Employee Retirement Security Act of 1974, as amended (“**ERISA**”)) for which the Company or any member of its “Controlled Group” (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Internal Revenue

Code of 1986, as amended (the “**Code**”)) would have any liability (each a “Plan”) has been maintained in compliance with its terms and with the requirements of all applicable statutes, rules and regulations including ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan excluding transactions effected pursuant to a statutory or administrative exemption; (iii) with respect to each Plan subject to Title IV of ERISA (A) no “reportable event” (within the meaning of Section 4043(c) of ERISA) has occurred or is reasonably expected to occur, (B) no Plan is or is reasonably expected to be “at risk” status (within the meaning of Section 430 of the Code or Section 303 of ERISA) (C) there has been no filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan or the receipt by the Company or any of its ERISA Affiliates from the Pension Benefit Guaranty Corporation or the plan administrator of any notice relating to the intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan, (D) no conditions contained in Section 303(k)(1)(A) of ERISA for imposition of a lien shall have been met with respect to any Plan and (E) neither the Company or any member of its Controlled Group has incurred, or reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guaranty Corporation in the ordinary course and without default) in respect of a Plan (including a “multiemployer plan”, within the meaning of Section 4001(c)(3) of ERISA) (“**Multiemployer Plan**”); (iv) no Multiemployer Plan is, or is expected to be, “insolvent” (within the meaning of Section 4245 of ERISA), in “reorganization” (within the meaning of Section 4241 of ERISA), or in “endangered” or “critical” status (within the meaning of Section 432 of the Code or Section 304 of ERISA); (v) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification; and (vi) there is no pending audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other governmental agency or any foreign regulatory agency with respect to any Plan.

(mm) The statistical and market-related data included or incorporated by reference in the most recent Preliminary Prospectus and the financial statements of the Company included in the most recent Preliminary Prospectus are based on or derived from sources that the Company believes to be reliable in all material respects.

(nn) The Company: (i) has been in compliance in all material respects with all applicable healthcare laws, rules and regulations, including, without limitation, the Federal Food, Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.) (the “**FDCA**”) and the regulations promulgated thereunder; (ii) within the last five (5) years has not received any Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from any Regulatory Agency or any other governmental authority alleging or asserting noncompliance with any applicable healthcare laws or the terms of any Permit, except in each case as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or third party alleging that any product operation or activity is in violation of any applicable healthcare laws or Permit and have no knowledge that any such governmental authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, except in each case as would not, individually or in the aggregate, have a Material Adverse Effect; (iv) (a) has filed, obtained,

maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any applicable healthcare laws or Permits, (b) except as would not, individually or in the aggregate, have a Material Adverse Effect, all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission), and (c) the Company is not aware of any reasonable basis for any material liability with respect to such filings; and (v) has not, and to the knowledge of the Company, the Company's officers, employees and agents have not, made any untrue statement of a material fact or fraudulent statement to any governmental authority or failed to disclose a material fact required to be disclosed to any governmental authority.

(oo) To the Company's knowledge, the descriptions of and information regarding the studies, tests and trials, and the data and results derived therefrom, contained or incorporated by reference in the most recent Preliminary Prospectus are accurate and complete in all material respects and the Company, after due inquiry, are not aware of any other studies, tests, trials, presentations, publications or other information relating to the Company's products that are not described or incorporated by reference in the most recent Preliminary Prospectus and that would reasonably call into question the validity, completeness, or accuracy of any study, test, trial, results or data described in the most recent Preliminary Prospectus when viewed in the context in which such studies, tests, trials results, or data are described therein. The studies, tests and trials conducted by or on behalf of or sponsored by the Company or in which the Company or its product candidates have participated were and, if still pending, are being conducted in all material respect in accordance with standard medical and scientific research procedures and all applicable Laws, including, but not limited to, the FDCA and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58 and 312. No investigational new drug application filed by or on behalf of the Company with the FDA has been terminated or suspended by the FDA, and neither the FDA nor any applicable foreign regulatory agency has commenced, or, to the knowledge of the Company, threatened to initiate, any action to place a clinical hold order on, or otherwise terminate, delay or suspend, any proposed or ongoing clinical investigation conducted or proposed to be conducted by or on behalf of the Company.

(pp) The Company is not, and as of the applicable Delivery Date and, after giving effect to the offer and sale of the Stock and the application of the proceeds therefrom as described under "Use of Proceeds" in the most recent Preliminary Prospectus and the Prospectus, will not be an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended (the "**Investment Company Act**"), and the rules and regulations of the Commission thereunder.

(qq) The statements set forth in each of the most recent Preliminary Prospectus and the Prospectus under the captions "Description of Capital Stock", "Material U.S. Federal Income Tax Consequences to Non-U.S. Holders of Our Common Stock", and "Underwriting", insofar as they purport to summarize the provisions of the laws and documents referred to therein, are accurate summaries of the provisions of such laws and documents in all material respects.

(rr) Except as described in the most recent Preliminary Prospectus and the Prospectus, there are no contracts, agreements or understandings between the Company and any person

granting such person the right (other than rights that have been waived in writing or otherwise satisfied) to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to the Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Securities Act.

(ss) The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against any of them or the Underwriters for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Stock.

(tt) The Company has not sold or issued any securities that would be integrated with the offering of the Stock contemplated by this Agreement pursuant to the Securities Act, the rules and regulations thereunder or the interpretations thereof by the Commission.

(uu) The Company and its affiliates have not taken, directly or indirectly, any action designed to constitute, or that has constituted, or that could reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company in connection with the offering of the shares of the Stock.

(vv) The Stock has been approved for listing, subject to official notice of issuance, on The Nasdaq Capital Market.

(ww) The Company has not distributed and, prior to the later to occur of any Delivery Date and completion of the distribution of the Stock, will not distribute any offering material in connection with the offering and sale of the Stock other than any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus to which the Representative has consented in accordance with Section 1(l) or 5(a)(vi) and any Issuer Free Writing Prospectus set forth on Schedule V hereto.

(xx) The Company is not in violation of or has received notice of any violation with respect to any federal or state law relating to discrimination in the hiring, promotion or pay of employees, nor any applicable federal or state wage and hour laws, nor any state law precluding the denial of credit due to the neighborhood in which a property is situated, the violation of any of which could reasonably be expected to have a Material Adverse Effect.

(yy) The Company, nor, to the knowledge of the Company, after due inquiry, any director, officer, agent, employee or other person associated with or acting on behalf of the Company, has in the course of its actions for, or on behalf of, the Company: (i) made any unlawful contribution, gift, or other unlawful expense relating to political activity; (ii) made any direct or indirect bribe, kickback, rebate, payoff, influence payment, or otherwise unlawfully provided anything of value, to any "foreign official" (as defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (collectively, the "**FCPA**")) or domestic government official; or (iii) violated or is in violation of any provision of the FCPA, the Bribery Act 2010 of the United Kingdom, as amended (the "**Bribery Act 2010**"), or any other applicable anti-bribery statute or regulation. The Company and, to the knowledge of the Company, the Company's

affiliates, have conducted their respective businesses in compliance with the FCPA, Bribery Act 2010, and all other applicable anti-bribery statutes and regulations, and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to ensure, continued compliance therewith.

(zz) The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, that have been issued, administered or enforced by any governmental agency (collectively, the “**Money Laundering Laws**”) and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(aaa) Neither the Company nor, to the knowledge of the Company, after due inquiry, any director, officer, agent, employee or affiliate of the Company is: (i) currently subject to or the target of any sanctions administered or enforced by the Office of Foreign Assets Control of the U.S. Treasury Department (“**OFAC**”), the U.S. Department of State, the United Nations Security Council (“**UNSC**”), the European Union (“**EU**”), Her Majesty’s Treasury (“**HMT**”), or other relevant sanctions authority (collectively, “**Sanctions**”); or (ii) located, organized or resident in a country or territory that is the subject or target of Sanctions (including, without limitation, Cuba, Iran, North Korea, Sudan, Syria and Crimea); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other person or entity, for the purpose of financing the activities of any person, or in any country or territory, that currently is the subject or target of Sanctions or in any other manner that will result in a violation by any person (including any person participating in the transaction whether as an underwriter, advisor, investor or otherwise) of Sanctions. The Company has not knowingly engaged in for the past five years, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any individual or entity, or in any country or territory, that at the time of the dealing or transaction, is or was the subject or target of Sanctions.

(bbb) The Company does not have any debt securities or preferred stock that are rated by any “nationally recognized statistical rating agency (as defined in Section 3(a)(62) of the Exchange Act.

(ccc) (i) There has been no security breach or incident, unauthorized access or disclosure, or other compromise of or relating to the Company’s information technology and computer systems, networks, hardware, software, data and databases (including the data and information of its customers, employees, suppliers, vendors and any third party data maintained, processed or stored by the Company, and any such data processed or stored by third parties on behalf of the Company), equipment or technology (collectively, “**IT Systems and Data**”), except for those that (A) have been remedied without material cost or liability or the duty to notify any other person and (B) would not, individually or in the aggregate, result in a Material Adverse Effect; (ii) the Company has not been notified of, and has no knowledge of any event or condition that could result in, any security breach or incident, unauthorized access or disclosure

or other compromise to its IT Systems and Data; and (iii) the Company has implemented commercially reasonable controls, policies, procedures, and technological safeguards to maintain and protect the integrity, continuous operation, redundancy and security of its IT Systems and Data consistent with industry standards and practices, or as required by applicable regulatory standards. The Company is presently in material compliance with all internal and external privacy policies, contractual obligations, applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations, in each case relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification. There is no pending or, to the knowledge of the Company, threatened action, suit or proceeding by or before any court, arbitrator or governmental or regulatory authority alleging non-compliance with the foregoing.

Any certificate signed by any officer of the Company and delivered to the Representative or counsel for the Underwriters in connection with the offering of the Stock shall be deemed a representation and warranty by the Company, as to matters covered thereby, to each Underwriter.

2. *Purchase of the Stock by the Underwriters.* On the basis of the representations, warranties and covenants contained in, and subject to the terms and conditions of, this Agreement, the Company agrees to sell 2,303,030 shares of the Firm Stock to the several Underwriters, and each of the Underwriters, severally and not jointly, agrees to purchase the number of shares of the Firm Stock set forth opposite that Underwriter's name in Schedule I hereto. The respective purchase obligations of the Underwriters with respect to the Firm Stock shall be rounded among the Underwriters to avoid fractional shares, as the Representative may determine.

In addition, the Company grants to the Underwriters an option to purchase up to 354,454 additional shares of Option Stock. Such option is exercisable in the event that the Underwriters sell more shares of Common Stock than the number of shares of Firm Stock in the offering and as set forth in Section 5 hereof. Each Underwriter agrees, severally and not jointly, to purchase the number of shares of Option Stock (subject to such adjustments to eliminate fractional shares as the Representative may determine) that bears the same proportion to the total number of shares of Option Stock to be sold on such Delivery Date as the number of shares of Firm Stock set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of shares of Firm Stock.

The purchase price payable by the Underwriters for both the Firm Stock and any Option Stock is \$7.755 per share, less, in the case of the Option Stock, an amount per share equal to any dividends or distributions declared by the Company on its Common Stock and payable on the Firm Stock but not payable on such Option Stock.

The Company is not obligated to deliver any of the Firm Stock or Option Stock to be delivered on the applicable Delivery Date, except upon payment for all such Stock to be purchased on such Delivery Date as provided herein.

3. *Offering of Stock by the Underwriters.* Upon authorization by the Representative of the release of the Firm Stock, the several Underwriters propose to offer the Firm Stock for sale upon the terms and conditions to be set forth in the Prospectus.

4. *Delivery of and Payment for the Stock.* Delivery of and payment for the Firm Stock shall be made at 10:00 A.M., New York City time, on the second full business day following the date of this Agreement or at such other date or place as shall be determined by agreement between the Representative and the Company. This date and time are sometimes referred to as the “**Initial Delivery Date**”. Delivery of the Firm Stock shall be made to the Representative for the account of each Underwriter against payment by the several Underwriters through the Representative and of the respective aggregate purchase prices of the Firm Stock being sold by the Company to or upon the order of the Company of the purchase price by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of each Underwriter hereunder. The Company shall deliver the Firm Stock through the facilities of The Depository Trust Company (“**DTC**”) unless the Representative shall otherwise instruct. The option granted in Section 2 will expire 30 days after the date of this Agreement and may be exercised in whole or from time to time in part by written notice being given to the Company by the Representative; provided that if such date falls on a day that is not a business day, the option granted in Section 2 will expire on the next succeeding business day. Such notice shall set forth the aggregate number of shares of Option Stock as to which the option is being exercised, the names in which the shares of Option Stock are to be registered, the denominations in which the shares of Option Stock are to be issued and the date and time, as determined by the Representative, when the shares of Option Stock are to be delivered; provided, however, that this date and time shall not be earlier than the Initial Delivery Date nor earlier than the second business day after the date on which the option shall have been exercised nor later than the fifth business day after the date on which the option shall have been exercised. Each date and time the shares of Option Stock are delivered is sometimes referred to as an “**Option Stock Delivery Date**”, and the Initial Delivery Date and any Option Stock Delivery Date are sometimes each referred to as a “**Delivery Date**”.

Delivery of the Option Stock by the Company and payment for the Option Stock by the several Underwriters through the Representative shall be made at 10:00 A.M., New York City time, on the date specified in the corresponding notice described in the preceding paragraph or at such other date or place as shall be determined by agreement between the Representative and the Company. On each Option Stock Delivery Date, the Company shall deliver, or cause to be delivered, the Option Stock, to the Representative for the account of each Underwriter, against payment by the several Underwriters through the Representative and of the respective aggregate purchase prices of the Option Stock being sold by the Company of the purchase price by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of each Underwriter hereunder. The Company shall deliver the Option Stock through the facilities of DTC unless the Representative shall otherwise instruct.

5. *Further Agreements of the Company and the Underwriters.* (a) The Company agrees:

(i) To prepare the Prospectus in a form approved by the Representative and to file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement; to make no further amendment or any supplement to the Registration Statement or the Prospectus prior to the last Delivery Date except as provided herein; to advise the Representative, promptly after it receives notice thereof, of the time when any amendment or supplement to the Registration Statement or the Prospectus has been filed and to furnish the Representative with copies thereof; to advise the Representative, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus, of the suspension of the qualification of the Stock for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding or examination for any such purpose or of any request by the Commission for the amending or supplementing of the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus or suspending any such qualification, to use promptly its best efforts to obtain its withdrawal.

(ii) To furnish promptly to each of the Representative and to counsel for the Underwriters a signed copy of the Registration Statement as originally filed with the Commission, and each amendment thereto filed with the Commission, including all consents and exhibits filed therewith.

(iii) To deliver promptly to the Representative such number of the following documents as the Representative shall reasonably request: (A) conformed copies of the Registration Statement as originally filed with the Commission and each amendment thereto (in each case excluding exhibits other than this Agreement and the computation of per share earnings), (B) each Preliminary Prospectus, the Prospectus and any amended or supplemented Prospectus, (C) each Issuer Free Writing Prospectus, and (D) any document incorporated by reference in any Preliminary Prospectus or the Prospectus; and, if the delivery of a prospectus is required at any time after the date hereof in connection with the offering or sale of the Stock or any other securities relating thereto and if at such time any events shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary to amend or supplement the Prospectus in order to comply with the Securities Act, to notify the Representative and, upon their request, to file such document and to prepare and furnish without charge to each Underwriter and to any dealer in securities as many copies as the Representative may from time to time reasonably request of an amended or supplemented Prospectus that will correct such statement or omission or effect such compliance.

(iv) To file as promptly as practicable with the Commission any amendment or supplement to the Registration Statement or the Prospectus that may, in the judgment of the Company or the Representative, be required by the Securities Act or requested by the Commission.

(v) Prior to filing with the Commission any amendment or supplement to the Registration Statement, the Prospectus, any document incorporated by reference in the Prospectus or any amendment to any document incorporated by reference in the Prospectus, to furnish a copy thereof to the Representative and counsel for the Underwriters and not file any such amendment or supplement to which the Representative shall reasonably object in writing unless, in the judgment of counsel to the Company, such filing is required by law.

(vi) Not to make any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus without the prior written consent of the Representative.

(vii) To comply with all applicable requirements of Rule 433 under the Securities Act with respect to any Issuer Free Writing Prospectus. If at any time after the date hereof any events shall have occurred as a result of which any Issuer Free Writing Prospectus, as then amended or supplemented, would conflict with the information in the Registration Statement, the most recent Preliminary Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or, if for any other reason it shall be necessary to amend or supplement any Issuer Free Writing Prospectus, to notify the Representative and, upon their request, to file such document and to prepare and furnish without charge to each Underwriter as many copies as the Representative may from time to time reasonably request of an amended or supplemented Issuer Free Writing Prospectus that will correct such conflict, statement or omission or effect such compliance.

(viii) As soon as practicable after the Effective Date (it being understood that the Company shall have until at least 410 days or, if the fourth quarter following the fiscal quarter that includes the Effective Date is the last fiscal quarter of the Company's fiscal year, 455 days after the end of the Company's current fiscal quarter), to make generally available to the Company's security holders and to deliver to the Representative (or make available through the Commission's EDGAR System) an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Securities Act and the rules and regulations thereunder (including, at the option of the Company, Rule 158 under the Securities Act, provided that such requirement shall be deemed met by the Company's compliance with its reporting requirements pursuant to the Exchange Act if such compliance satisfied the conditions of Rule 158 and the Company's reports pursuant to the Exchange Act are available on the Commission's EDGAR System).

(ix) Promptly from time to time to take such action as the Representative may reasonably request to qualify the Stock for offering and sale under the securities or Blue Sky laws of Canada and such other jurisdictions as the Representative may request and to

comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Stock; *provided*, that in connection therewith the Company shall not be required to (A) qualify as a foreign corporation in any jurisdiction in which it would not otherwise be required to so qualify, (B) file a general consent to service of process in any such jurisdiction, or (C) subject itself to taxation in any jurisdiction in which it would not otherwise be subject.

(x) For a period commencing on the date hereof and ending on the 45th day after the date of the Prospectus (the “**Lock-Up Period**”), not to, directly or indirectly, (A) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock (other than the Stock and shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans existing on the date hereof or pursuant to currently outstanding options, warrants or rights not issued under one of those plans), or sell or grant options, rights or warrants with respect to any shares of Common Stock or securities convertible into or exchangeable for Common Stock (other than the grant of options pursuant to option plans existing on the date hereof), (B) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of such shares of Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (C) file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible, exercisable or exchangeable into Common Stock or any other securities of the Company (other than any registration statement on Form S-8), or (D) publicly disclose the intention to do any of the foregoing, in each case without the prior written consent of the Representative, on behalf of the Underwriters, and to cause each officer, director and stockholder of the Company set forth on Schedule II hereto to furnish to the Representative, prior to the Initial Delivery Date, a letter or letters, substantially in the form of Exhibit A hereto (the “**Lock-Up Agreements**”).

(xi) To apply the net proceeds from the sale of the Stock being sold by the Company substantially in accordance with the description as set forth in the Prospectus under the caption “Use of Proceeds.”

(xii) To file with the Commission such information on Form 10-Q or Form 10-K as may be required by Rule 463 under the Securities Act.

(xiii) If the Company elects to rely upon Rule 462(b) under the Securities Act, the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) under the Securities Act by 10:00 P.M., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing pay the Commission the filing fee for the Rule 462(b) Registration Statement.

(xiv) The Company will promptly notify the Representative if the Company ceases to be an Emerging Growth Company at any time prior to the later of (A) the time when a prospectus relating to the offering or sale of the Stock or any other securities relating thereto is not required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) and (B) completion of the Lock-Up Period.

(xv) The Company and its affiliates will not take, directly or indirectly, any action designed to or that has constituted or that reasonably would be expected to cause or result in the stabilization or manipulation of the price of any security of the Company in connection with the offering of the Stock.

(xvi) The Company will do and perform all things required or necessary to be done and performed under this Agreement by it prior to each Delivery Date, and to satisfy all conditions precedent to the Underwriters' obligations hereunder to purchase the Stock.

(b) Each Underwriter severally agrees that such Underwriter shall not include any "issuer information" (as defined in Rule 433 under the Securities Act) in any "free writing prospectus" (as defined in Rule 405 under the Securities Act) used or referred to by such Underwriter without the prior consent of the Company (any such issuer information with respect to whose use the Company has given its consent, "**Permitted Issuer Information**"); provided that (i) no such consent shall be required with respect to any such issuer information contained in any document filed by the Company with the Commission prior to the use of such free writing prospectus, and (ii) "issuer information", as used in this Section 5(b), shall not be deemed to include information prepared by or on behalf of such Underwriter on the basis of or derived from issuer information.

6. *Expenses.* The Company agrees, whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, to pay all expenses, costs, fees and taxes incident to and in connection with (a) the authorization, issuance, sale and delivery of the Stock and any stamp duties or other taxes payable in that connection, and the preparation and printing of certificates for the Stock; (b) the preparation, printing and filing under the Securities Act of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, and any amendment or supplement thereto, or any document incorporated by reference therein; (c) the distribution of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, and any amendment or supplement thereto, all as provided in this Agreement; (d) the production and distribution of this Agreement, any supplemental agreement among Underwriters, and any other related documents in connection with the offering, purchase, sale and delivery of the Stock; (e) the filing fees incidental to the review by FINRA of the terms of sale of the Stock (including reasonable related fees and expenses of counsel to the Underwriters); (f) the listing of the Stock on The Nasdaq Capital Market and/or any other exchange; (g) the qualification of the Stock under the securities laws of the several jurisdictions as provided in Section 5(a)(ix) and the preparation, printing and distribution of a Blue Sky Memorandum (including reasonable related fees and expenses of counsel to the Underwriters); (h) the preparation, printing and distribution of one or more

versions of the Preliminary Prospectus and the Prospectus for distribution in Canada, including in the form of a Canadian “wrapper” (including reasonable related fees and expenses of Canadian counsel to the Underwriters); (i) the investor presentations on any “road show”, undertaken in connection with the marketing of the Stock, including, without limitation, expenses associated with any electronic road show, travel and lodging expenses of the representatives and officers of the Company and 50% of the cost of any aircraft chartered in connection with the road show; and (j) all other costs and expenses incident to the performance of the obligations of the Company under this Agreement; *provided* that, in the case of (e), (g) and (h) above, reasonable related fees and expenses of counsel to the Underwriters in an amount that is greater than \$50,000, in the aggregate, shall not be covered by this Section. Except as provided in this Section 6 and in Section 11, the Underwriters shall pay their own costs and expenses, including the costs and expenses of their counsel, any transfer taxes on the Stock which they may sell and the expenses of advertising any offering of the Stock made by the Underwriters.

7. *Conditions of Underwriters’ Obligations.* The respective obligations of the Underwriters hereunder are subject to the accuracy, when made and on each Delivery Date, of the representations and warranties of the Company contained herein, to the performance by the Company of its obligations hereunder, and to each of the following additional terms and conditions:

(a) The Prospectus shall have been timely filed with the Commission in accordance with Section 5(a)(i). The Company shall have complied with all filing requirements applicable to any Issuer Free Writing Prospectus used or referred to after the date hereof; no stop order suspending the effectiveness of the Registration Statement or preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus shall have been issued and no proceeding or examination for such purpose shall have been initiated or threatened by the Commission; and any request of the Commission for inclusion of additional information in the Registration Statement or the Prospectus or otherwise shall have been complied with. If the Company has elected to rely upon Rule 462(b) under the Securities Act, the Rule 462(b) Registration Statement shall have become effective by 10:00 P.M., Washington, D.C. time, on the date of this Agreement.

(b) No Underwriter shall have discovered and disclosed to the Company on or prior to such Delivery Date that the Registration Statement, the Prospectus or the Pricing Disclosure Package, or any amendment or supplement thereto, contains an untrue statement of a fact which, in the opinion of Davis Polk & Wardwell LLP, counsel for the Underwriters, is material or omits to state a fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(c) All corporate proceedings and other legal matters incident to the authorization, form and validity of this Agreement, the Stock, the Registration Statement, the Prospectus and any Issuer Free Writing Prospectus, and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Underwriters, and the Company

shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

(d) Latham & Watkins LLP shall have furnished to the Representative its written opinion and negative assurance letter, as counsel to the Company, addressed to the Underwriters and dated such Delivery Date, in form and substance reasonably satisfactory to the Representative.

(e) Cooley LLP shall have furnished to the Representative its written opinion, as patent counsel to the Company, addressed to the Underwriters and dated such Delivery Date, in form and substance reasonably satisfactory to the Representative.

(f) The Representative shall have received from Davis Polk & Wardwell LLP, counsel for the Underwriters, such opinion or opinions, dated such Delivery Date, with respect to the issuance and sale of the Stock, the Registration Statement, the Prospectus and the Pricing Disclosure Package and other related matters as the Representative may reasonably require, and the Company shall have furnished to such counsel such documents as they reasonably request for the purpose of enabling them to pass upon such matters.

(g) At the time of execution of this Agreement, the Representative shall have received from BDO USA, LLP a letter, in form and substance satisfactory to the Representative, addressed to the Underwriters and dated the date hereof (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, and (ii) stating, as of the date hereof (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the most recent Preliminary Prospectus, as of a date not more than three days prior to the date hereof), the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to underwriters in connection with registered public offerings.

(h) With respect to the letter of BDO USA, LLP referred to in the preceding paragraph and delivered to the Representative concurrently with the execution of this Agreement (the "**initial letter**"), the Company shall have furnished to the Representative a letter (the "**bring-down letter**") of such accountants, addressed to the Underwriters and dated such Delivery Date (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of the date of the bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than three days prior to the date of the bring-down letter), the conclusions and findings of such firm with respect to the financial information and other matters covered by the initial letter, and (iii) confirming in all material respects the conclusions and findings set forth in the initial letter.

(i) The Company shall have furnished to the Representative a certificate, dated such Delivery Date, of its Chief Executive Officer and its Chief Financial Officer as to such matters as the Representative may reasonably request, including, without limitation, a statement:

(i) That the representations, warranties and agreements of the Company in Section 1 are true and correct on and as of such Delivery Date, and the Company has complied with all its agreements contained herein and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such Delivery Date;

(ii) That no stop order suspending the effectiveness of the Registration Statement has been issued; and no proceedings or examination for that purpose have been instituted or, to the knowledge of such officers, threatened; and the Commission shall not have notified the Company of any objection to the use of the form of the Registration Statement or any post-effective amendment thereto; and

(iii) That they have examined the Registration Statement, the Prospectus and the Pricing Disclosure Package, and, in their opinion, (A) (1) the Registration Statement, as of the Effective Date, (2) the Prospectus, as of its date and on the applicable Delivery Date, and (3) the Pricing Disclosure Package, as of the Applicable Time, did not and do not contain any untrue statement of a material fact and did not and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (except in the case of the Registration Statement, in the light of the circumstances under which they were made) not misleading, and (B) since the Effective Date, no event has occurred that should have been set forth in a supplement or amendment to the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus that has not been so set forth.

(j) Except as described in the most recent Preliminary Prospectus, (i) neither the Company nor any of its subsidiaries shall have sustained, since the date of the latest audited financial statements included or incorporated by reference in the most recent Preliminary Prospectus, any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, or (ii) since such date there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), results of operations, stockholders' equity, properties, management, business or prospects of the Company and its subsidiaries taken as a whole, the effect of which, in any such case described in clause (i) or (ii), is, individually or in the aggregate, in the judgment of the Representative, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

(k) Subsequent to the execution and delivery of this Agreement there shall not have occurred any of the following: (i) (A) trading in securities generally on any securities exchange that has registered with the Commission under Section 6 of the Exchange Act (including the New York Stock Exchange, The NASDAQ Global Select Market, The NASDAQ Global Market or The NASDAQ Capital Market), or (B) trading in any securities of the Company on any exchange or in the over-the-counter market, shall have been suspended or materially limited or the settlement of such trading generally shall have been materially disrupted or minimum prices shall have been established on any such exchange or such market by the Commission, by such exchange or by any other regulatory body or governmental authority having jurisdiction, (ii) a general moratorium on commercial banking activities shall have been declared by federal or state authorities, (iii) the United States shall have become engaged in hostilities, there shall have been an escalation in hostilities involving the United States or there shall have been a declaration of a national emergency or war by the United States, or (iv) there shall have occurred such a material adverse change in general economic, political or financial conditions, including, without limitation, as a result of terrorist activities after the date hereof (or the effect of international conditions on the financial markets in the United States shall be such) or any other calamity or crisis either within or outside the United States, as to make it, in the judgment of the Representative, impracticable or inadvisable to proceed with the public offering or delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

(l) The Nasdaq Capital Market shall have approved the Stock for listing, subject only to official notice of issuance.

(m) The Lock-Up Agreements between the Representative and the officers, directors and stockholders of the Company set forth on Schedule II, delivered to the Representative on or before the date of this Agreement, shall be in full force and effect on such Delivery Date.

(n) On or prior to each Delivery Date, the Company shall have furnished to the Underwriters such further certificates and documents as the Representative may reasonably request.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriters.

8. *Indemnification and Contribution.*

(a) The Company hereby agrees to indemnify and hold harmless each Underwriter, its affiliates, directors, officers and employees and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof (including, but not limited to, any loss, claim, damage, liability or action relating to purchases and sales of Stock), to which that Underwriter, affiliate, director, officer, employee or controlling person may become

subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in (A) any Preliminary Prospectus, the Registration Statement, the Prospectus or in any amendment or supplement thereto, (B) any Issuer Free Writing Prospectus or in any amendment or supplement thereto, (C) any Permitted Issuer Information used or referred to in any “free writing prospectus” (as defined in Rule 405 under the Securities Act) used or referred to by any Underwriter, or (D) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Stock, including any “road show” (as defined in Rule 433 under the Securities Act) not constituting an Issuer Free Writing Prospectus and any Written Testing-the-Waters Communication (“**Marketing Materials**”) or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Permitted Issuer Information, or any Marketing Materials, any material fact required to be stated therein or necessary to make the statements therein not misleading, and shall reimburse each Underwriter and each such affiliate, director, officer, employee or controlling person promptly upon demand for any legal or other expenses reasonably incurred by that Underwriter, affiliate, director, officer, employee or controlling person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of, or is based upon, any untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any such amendment or supplement thereto or in any Permitted Issuer Information, or any Marketing Materials, in reliance upon and in conformity with written information concerning such Underwriter furnished to the Company through the Representative by or on behalf of any Underwriter specifically for inclusion therein, which information consists solely of the information specified in Section 8(e). The foregoing indemnity agreement is in addition to any liability which the Company may otherwise have to any Underwriter or to any affiliate, director, officer, employee or controlling person of that Underwriter.

(b) Each Underwriter, severally and not jointly, shall indemnify and hold harmless the Company, its directors, the officers of the Company who sign the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof, to which the Company or any such director, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Marketing Materials, or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement

thereto or in any Marketing Materials, any material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information concerning such Underwriter furnished to the Company through the Representative by or on behalf of that Underwriter specifically for inclusion therein, which information is limited to the information set forth in Section 8(e). The foregoing indemnity agreement is in addition to any liability that any Underwriter may otherwise have to the Company or any such director, officer or controlling person.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of any claim or the commencement of any action, the indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the claim or the commencement of that action; *provided, however*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have under this Section 8 except to the extent it has been materially prejudiced (through the forfeiture of substantive rights and defenses) by such failure and, *provided, further*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have to an indemnified party otherwise than under this Section 8. If any such claim or action shall be brought against an indemnified party, and it shall notify the indemnifying party thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense thereof with counsel reasonably satisfactory to the indemnified party. After notice from the indemnifying party to the indemnified party of its election to assume the defense of such claim or action, the indemnifying party shall not be liable to the indemnified party under this Section 8 for any legal or other expenses subsequently incurred by the indemnified party in connection with the defense thereof other than reasonable costs of investigation; *provided, however*, that the indemnified party shall have the right to employ counsel to represent jointly the indemnified party and those other indemnified parties and their respective directors, officers, employees and controlling persons who may be subject to liability arising out of any claim in respect of which indemnity may be sought under this Section 8 if (i) the indemnified party and the indemnifying party shall have so mutually agreed; (ii) the indemnifying party has failed within a reasonable time to retain counsel reasonably satisfactory to the indemnified party; (iii) the indemnified party and its directors, officers, employees and controlling persons shall have reasonably concluded that there may be legal defenses available to them that are different from or in addition to those available to the indemnifying party; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the indemnified parties or their respective directors, officers, employees or controlling persons, on the one hand, and the indemnifying party, on the other hand, and representation of both sets of parties by the same counsel would be inappropriate due to actual or potential differing interests between them, and in any such event the fees and expenses of such separate counsel shall be paid by the indemnifying party. No indemnifying party shall (x) without the prior written consent of the indemnified parties (which consent shall not be unreasonably withheld), settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which

indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and does not include a statement as to, or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party, or (y) be liable for any settlement of any such action effected without its written consent (which consent shall not be unreasonably withheld), but if settled with the consent of the indemnifying party or if there be a final judgment for the plaintiff in any such action, the indemnifying party agrees to indemnify and hold harmless any indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by Section 8(a) hereof, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request or disputed in good faith the indemnified party's entitlement to such reimbursement prior to the date of such settlement.

(d) If the indemnification provided for in this Section 8 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or 8(b) in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other, from the offering of the Stock, or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions that resulted in such loss, claim, damage or liability, or action in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other, with respect to such offering shall be deemed to be in the same proportion as the total net proceeds from the offering of the Stock purchased under this Agreement (before deducting expenses) received by the Company, as set forth in the table on the cover page of the Prospectus, on the one hand, and the total underwriting discounts and commissions received by the Underwriters with respect to the shares of the Stock purchased under this Agreement, as set forth in the table on the cover page of the Prospectus, on the other hand. The relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were to be determined by pro rata

allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage or liability, or action in respect thereof, referred to above in this Section 8(d) shall be deemed to include, for purposes of this Section 8(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Stock exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute as provided in this Section 8(d) are several in proportion to their respective underwriting obligations and not joint.

(e) The Underwriters severally confirm and the Company acknowledges and agrees that the statements regarding delivery of shares by the Underwriters set forth on the cover page of, and the concession and reallowance figures and the paragraph relating to stabilization by the Underwriters appearing under the caption "Underwriting" in, the most recent Preliminary Prospectus and the Prospectus are correct and constitute the only information concerning such Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Marketing Materials.

9. *Defaulting Underwriters.*

(a) If, on any Delivery Date, any Underwriter defaults in its obligations to purchase the Stock that it has agreed to purchase under this Agreement, the remaining non-defaulting Underwriters may in their discretion arrange for the purchase of such Stock by the non-defaulting Underwriters or other persons satisfactory to the Company on the terms contained in this Agreement. If, within 36 hours after any such default by any Underwriter, the non-defaulting Underwriters do not arrange for the purchase of such Stock, then the Company shall be entitled to a further period of 36 hours within which to procure other persons satisfactory to the non-defaulting Underwriters to purchase such Stock on such terms. In the event that within the respective prescribed periods, the non-defaulting Underwriters notify the Company that they have so arranged for the purchase of such Stock, or the Company notifies the non-defaulting Underwriters that it has so arranged for the purchase of such Stock, either the non-defaulting Underwriters or the Company may postpone such Delivery Date for up to seven full business days in order to effect any changes that in the opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement, the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement, the Prospectus or in any such

other document or arrangement that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context requires otherwise, any party not listed in Schedule I hereto that, pursuant to this Section 9, purchases Stock that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any arrangements for the purchase of the Stock of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the total number of shares of the Stock that remains unpurchased does not exceed one-eleventh of the total number of shares of all the Stock, then the Company shall have the right to require each non-defaulting Underwriter to purchase the total number of shares of Stock that such Underwriter agreed to purchase hereunder plus such Underwriter's pro rata share (based on the total number of shares of Stock that such Underwriter agreed to purchase hereunder) of the Stock of such defaulting Underwriter or Underwriters for which such arrangements have not been made; *provided* that the non-defaulting Underwriters shall not be obligated to purchase more than 110% of the total number of shares of Stock that it agreed to purchase on such Delivery Date pursuant to the terms of Section 2.

(c) If, after giving effect to any arrangements for the purchase of the Stock of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the total number of shares of Stock that remains unpurchased exceeds one-eleventh of the total number of shares of all the Stock, or if the Company shall not exercise the right described in paragraph (b) above, then this Agreement shall terminate without liability on the part of the non-defaulting Underwriters. Any termination of this Agreement pursuant to this Section 9 shall be without liability on the part of the Company, except that the Company will continue to be liable for the payment of expenses as set forth in Sections 6 and 11 and except that the provisions of Section 8 shall not terminate and shall remain in effect.

(d) Nothing contained herein shall relieve a defaulting Underwriter of any liability it may have to the Company or any non-defaulting Underwriter for damages caused by its default.

10. *Termination.* The obligations of the Underwriters hereunder may be terminated by the Representative by notice given to and received by the Company prior to delivery of and payment for the Firm Stock if, prior to that time, any of the events described in Sections 7(j) and 7(k) shall have occurred or if the Underwriters shall decline to purchase the Stock for any reason permitted under this Agreement.

11. *Reimbursement of Underwriters' Expenses.* If (a) the Company shall fail to tender the Stock for delivery to the Underwriters for any reason, or (b) the Underwriters shall decline to purchase the Stock for any reason permitted under this Agreement, the Company will reimburse the Underwriters for all reasonable out-of-pocket expenses (including fees and disbursements of counsel for the Underwriters) incurred by the Underwriters in connection with this Agreement and the proposed purchase of the Stock, and upon demand the Company shall pay the full amount thereof to the Representative. If this Agreement is terminated pursuant to

Section 9 by reason of the default of one or more Underwriters, the Company shall not be obligated to reimburse any defaulting Underwriter on account of those expenses.

12. *Research Analyst Independence.* The Company acknowledges that the Underwriters' research analysts and research departments are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Underwriters' research analysts may hold views and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the offering that differ from the views of their respective investment banking divisions. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by such Underwriters' investment banking divisions. The Company acknowledges that each of the Underwriters is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short positions in debt or equity securities of the companies that may be the subject of the transactions contemplated by this Agreement.

13. *No Fiduciary Duty.* The Company acknowledges and agrees that in connection with this offering, sale of the Stock or any other services the Underwriters may be deemed to be providing hereunder, notwithstanding any preexisting relationship, advisory or otherwise, between the parties or any oral representations or assurances previously or subsequently made by the Underwriters: (a) no fiduciary or agency relationship between the Company and any other person, on the one hand, and the Underwriters, on the other, exists; (b) the Underwriters are not acting as advisors, expert or otherwise, to the Company, including, without limitation, with respect to the determination of the public offering price of the Stock, and such relationship between the Company, on the one hand, and the Underwriters, on the other, is entirely and solely commercial, based on arms-length negotiations; (c) any duties and obligations that the Underwriters may have to the Company shall be limited to those duties and obligations specifically stated herein; and (d) the Underwriters and their respective affiliates may have interests that differ from those of the Company. The Company hereby waives any claims that the Company may have against the Underwriters with respect to any breach of fiduciary duty in connection with this offering.

14. *Notices, etc.* All statements, requests, notices and agreements hereunder shall be in writing, and:

(a) if to the Underwriters, shall be delivered or sent by mail or facsimile transmission to BMO Capital Markets Corp. at 3 Times Square, 25th Floor, New York, New York 10036, Attention: Legal Department (Fax: (212) 702-1205);

(b) if to the Company, shall be delivered or sent by mail or facsimile transmission to the address of the Company set forth in the Registration Statement, Attention: Chief Executive Officer (Email: vmehta@bioexceltherapeutics.com), with a copy to Latham & Watkins LLP, Attention: Peter N. Handrinis, Esq. (Email: peter.handrinis@lw.com).

Any such statements, requests, notices or agreements shall take effect at the time of receipt thereof.

15. *Persons Entitled to Benefit of Agreement.* This Agreement shall inure to the benefit of and be binding upon the Underwriters, the Company, and their respective successors. This Agreement and the terms and provisions hereof are for the sole benefit of only those persons, except that (a) the representations, warranties, indemnities and agreements of the Company contained in this Agreement shall also be deemed to be for the benefit of the directors, officers and employees of the Underwriters and each person or persons, if any, who control any Underwriter within the meaning of Section 15 of the Securities Act, and (b) the indemnity agreement of the Underwriters contained in Section 8(b) of this Agreement shall be deemed to be for the benefit of the directors of the Company, the officers of the Company who have signed the Registration Statement and any person controlling the Company within the meaning of Section 15 of the Securities Act. Nothing in this Agreement is intended or shall be construed to give any person, other than the persons referred to in this Section 15, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein.

16. *Survival.* The respective indemnities, representations, warranties and agreements of the Company and the Underwriters contained in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall survive the delivery of and payment for the Stock and shall remain in full force and effect, regardless of any investigation made by or on behalf of any of them or any person controlling any of them.

17. *Definition of the Terms "Business Day", "Affiliate" and "Subsidiary".* For purposes of this Agreement, (a) "**business day**" means each Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close, and (b) "**affiliate**" and "**subsidiary**" have the meanings set forth in Rule 405 under the Securities Act.

18. *Governing Law.* **This Agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to conflict of laws principles (other than Section 5-1401 of the General Obligations Law).**

19. *Waiver of Jury Trial.* The Company and the Underwriters hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

20. *Counterparts.* This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original but all such counterparts shall together constitute one and the same instrument.

21. *Headings.* The headings herein are inserted for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

22. *Recognition of the U.S. Special Resolution Regimes*

(a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement and any interest and obligation in or under this Agreement will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

(c) For purposes of this Section 22:

“BHC Act Affiliate” has the meaning assigned to the term “affiliate” (in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k));

“Covered Entity” means any of the following:

- (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or
- (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b);

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1 as applicable;

“U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

If the foregoing correctly sets forth the agreement between the Company and the Underwriters, please indicate your acceptance in the space provided for that purpose below.

Very truly yours,

BIOXCEL THERAPEUTICS, INC.

By: /s/ Richard Steinhart

Name: Richard Steinhart

Title: Senior Vice President and Chief Financial Officer

Accepted:

BMO CAPITAL MARKETS CORP.,

For itself and as Representative
of the several Underwriters named
in Schedule I hereto

By BMO CAPITAL MARKETS CORP.

By: /s/ Helen Oesch
Authorized Representative

SCHEDULE I

Underwriters	Number of Shares of Firm Stock
BMO Capital Markets Corp.	1,727,273
ThinkEquity, a division of Fordham Financial Management, Inc.	575,757
Total	2,303,030

SCHEDULE II

PERSONS DELIVERING LOCK-UP AGREEMENTS

Directors

- Peter Mueller
- Krishnan Nandabalan
- Steve Laumas
- Michael Votruba

Officers

- Vimal Mehta
- Richard Steinhart
- Vince O'Neill
- Frank Yocca

Securityholders

- BioXcel Corporation
 - RSJ Investments SICAV
-

SCHEDULE III

ORALLY CONVEYED PRICING INFORMATION

1. \$8.25 per share
 2. 2,303,030 shares of Firm Stock and 345,454 shares of Option Stock
-

SCHEDULE IV

ISSUER FREE WRITING PROSPECTUSES — ROAD SHOW MATERIALS

Electronic Road Show.

SCHEDULE V

ISSUER FREE WRITING PROSPECTUS

None.

EXHIBIT A

LOCK-UP LETTER AGREEMENT

BMO CAPITAL MARKETS CORP.,
As Representative of the several
Underwriters named in Schedule I,

c/o BMO Capital Markets Corp.
3 Times Square, 25th Floor
New York, New York 10036

Ladies and Gentlemen:

The undersigned understands that you and certain other firms (the “**Underwriters**”) propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) providing for the purchase by the Underwriters of shares (the “**Stock**”) of Common Stock, par value \$0.001 per share (the “**Common Stock**”), of BioXcel Therapeutics, Inc., a Delaware corporation (the “**Company**”), and that the Underwriters propose to reoffer the Stock to the public (the “**Offering**”).

In consideration of the execution of the Underwriting Agreement by the Underwriters, and for other good and valuable consideration, the undersigned hereby irrevocably agrees that, without the prior written consent of BMO Capital Markets Corp. (the “**Representative**”), on behalf of the Underwriters, the undersigned will not, directly or indirectly, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock (including, without limitation, shares of Common Stock that may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and shares of Common Stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for Common Stock, (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (3) make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock or any other securities of the Company, or (4) publicly disclose the intention to do any of the foregoing for a period commencing on the date hereof and ending on the 45th day after the date of the Prospectus relating to the Offering (such 45-day period, the “**Lock-Up Period**”).

Exhibit A-1

The foregoing paragraph shall not apply to (a) transactions relating to shares of Common Stock or other securities acquired in the open market after the completion of the offering, (b) bona fide gifts, sales or other dispositions of shares of any class of the Company's capital stock, in each case that are made exclusively between and among the undersigned or members of the undersigned's family, or affiliates of the undersigned, including its partners (if a partnership) or members (if a limited liability company); *provided* that it shall be a condition to any transfer pursuant to this clause (b) that (i) the transferee/donee agrees to be bound by the terms of this Lock-Up Letter Agreement (including, without limitation, the restrictions set forth in the preceding sentence) to the same extent as if the transferee/donee were a party hereto, (ii) each party (donor, donee, transferor or transferee) shall not be required by law (including without limitation the disclosure requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), and the Exchange Act) to make, and shall agree to not voluntarily make, any filing or public announcement of the transfer or disposition prior to the expiration of the 45-day period referred to above, and (iii) the undersigned notifies the Representative at least two business days prior to the proposed transfer or disposition, (c) the exercise of warrants or the exercise of stock options granted pursuant to the Company's stock option/incentive plans or otherwise outstanding on the date hereof; *provided*, that the restrictions shall apply to shares of Common Stock issued upon such exercise or conversion, (d) the establishment of any contract, instruction or plan that satisfies all of the requirements of Rule 10b5-1 (a "**Rule 10b5-1 Plan**") under the Exchange Act; *provided, however*, that no sales of Common Stock or securities convertible into, or exchangeable or exercisable for, Common Stock, shall be made pursuant to a Rule 10b5-1 Plan prior to the expiration of the Lock-Up Period (as the same may be extended pursuant to the provisions hereof); *provided further*, that the Company is not required to report the establishment of such Rule 10b5-1 Plan in any public report or filing with the Commission under the Exchange Act during the lock-up period and does not otherwise voluntarily effect any such public filing or report regarding such Rule 10b5-1 Plan, and (e) any demands or requests for, exercise any right with respect to, or take any action in preparation of, the registration by the Company under the Act of the undersigned's shares of Common Stock, provided that no transfer of the undersigned's shares of Common Stock registered pursuant to the exercise of any such right and no registration statement shall be filed under the Act with respect to any of the undersigned's shares of Common Stock during the Lock-Up Period.

In furtherance of the foregoing, the Company and its transfer agent are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Letter Agreement.

It is understood that, if the Company notifies the Underwriters that it does not intend to proceed with the Offering, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock, the undersigned will be released from its obligations under this Lock-Up Letter Agreement.

Exhibit A-2

The undersigned understands that the Company and the Underwriters will proceed with the Offering in reliance on this Lock-Up Letter Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

This Lock-Up Letter Agreement shall automatically terminate upon the earliest to occur, if any, of (1) the termination of the Underwriting Agreement before the sale of any Stock to the Underwriters, (2) November 1, 2019, in the event that the Underwriting Agreement has not been executed by that date and (3) the Representative notifying the Company, or the Company notifying the Underwriters, in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Offering.

Exhibit A-3

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Letter Agreement and that, upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

Very truly yours,

By: _____
Name:
Title:

Dated: _____

Exhibit A-4

200 Clarendon Street
 Boston, Massachusetts 02116
 Tel: +1.617.948.6000 Fax: +1.617.948.6001
 www.lw.com

LATHAM & WATKINS LLP

FIRM / AFFILIATE OFFICES

Beijing	Moscow
Boston	Munich
Brussels	New York
Century City	Orange County
Chicago	Paris
Dubai	Riyadh
Düsseldorf	San Diego
Frankfurt	San Francisco
Hamburg	Seoul
Hong Kong	Shanghai
Houston	Silicon Valley
London	Singapore
Los Angeles	Tokyo
Madrid	Washington, D.C.
Milan	

September 27, 2019

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

Re: Registration Statement on Form S-3 (Registration No. 333-230674)

Ladies and Gentlemen:

We have acted as special counsel to BioXcel Therapeutics, Inc., a Delaware corporation (the "**Company**"), in connection with the proposed issuance of up to 2,648,484 shares (the "**Shares**") of common stock, \$0.001 par value per share (the "**Common Stock**"), pursuant to a registration statement on Form S-3 under the Securities Act of 1933, as amended (the "**Act**"), filed with the Securities and Exchange Commission (the "**Commission**") on April 1, 2019 (Registration No. 333-230674), including the information deemed to be a part of the registration statement pursuant to Rule 430B of the Act (as so filed, the "**Registration Statement**"), a base prospectus dated April 4, 2019 (the "**Base Prospectus**"), a preliminary prospectus supplement dated September 25, 2019 filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the "**Preliminary Prospectus**"), and a prospectus supplement dated September 26, 2019 filed with the Commission pursuant to Rule 424(b) under the Act (together with Base Prospectus, the "**Prospectus**"). The Shares are being sold pursuant to an underwriting agreement dated September 26, 2019, between BMO Capital Markets Corp., as representative of the several underwriters listed on Schedule A thereto, and the Company (the "**Underwriting Agreement**"). 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, the Preliminary Prospectus or the 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, 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 purchasers, and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Underwriting Agreement, 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 provided in the General Corporation Law of the State of Delaware.

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 Company's Form 8-K dated September 27, 2019 and to the reference to our firm in the Prospectus under the heading "Legal Matters." 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