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**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): October 23, 2017

**CORBUS PHARMACEUTICALS HOLDINGS, INC.**

*(Exact name of registrant as specified in its charter)*

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

**001-37348**  
*(Commission  
File Number)*

**46-4348039**  
*(IRS Employer  
Identification No.)*

**100 River Ridge Drive, Norwood, MA**  
*(Address of principal executive offices)*

**02062**  
*(Zip Code)*

Registrant's telephone number, including area code: **(617) 963-0100**

**Not Applicable**

*(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 (see General Instruction A.2. below):

- 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))

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

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.

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### **Item 1.01 Entry into a Material Definitive Agreement.**

On October 24, 2017, Corbus Pharmaceuticals Holdings, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Cantor Fitzgerald & Co. (the “Representative”), as representative to the several underwriters named therein (the “Underwriters”), relating to the offering, issuance and sale of 4,650,000 shares (the “Shares”) of the Company’s common stock, par value \$0.0001 (the “Common Stock”), at a price to the public of \$7.00 per share (the “Offering”). The net proceeds to the Company from the Offering are expected to be approximately \$30.4 million, after deducting underwriting discounts and commissions and other estimated offering expenses payable by the Company. The Offering is expected to close on or about October 26, 2017, subject to customary closing conditions. Pursuant to the Underwriting Agreement, the Underwriters have a 30-day option to purchase up to 697,500 additional shares of Common Stock on the same terms as the Underwriters are purchasing the base number of shares.

The Offering is being made pursuant to the Company’s effective registration statement on Form S-3 (File No. 333-207936) previously filed with and declared effective by the Securities and Exchange Commission (the “SEC”) and a prospectus supplement and accompanying prospectus filed with the SEC.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, 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 representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties.

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 report and is incorporated by reference herein. A copy of the opinion of Lowenstein Sandler LLP relating to the legality of the issuance and sale of Shares in the Offering is attached as Exhibit 5.1 to this report.

### **Item 1.02 Termination of Material Definitive Agreement.**

On October 23, 2017, prior to the Offering, the Company provided notice of, and the Representative agreed to, its termination of the Controlled Equity Offering<sup>SM</sup> Sales Agreement, dated as of November 23, 2016 (the “Sales Agreement”), by and between the Company and the Representative, as agent, effective immediately. As previously reported, pursuant to the terms of the Sales Agreement, the Company could offer and sell shares of its Common Stock having an aggregate offering price of up to \$35 million from time to time through the Representative, as agent. From November 23, 2016 to March 31, 2017, the Company sold shares of its Common Stock pursuant to the Sales Agreement for aggregate gross proceeds of approximately \$15.4 million. The Company did not make any sales pursuant to the Sales Agreement subsequent to March 31, 2017.

The foregoing description of the Sales Agreement is not complete and is qualified in its entirety by reference to the full text of the Sales Agreement, a copy of which was filed as Exhibit 1.1 to the Current Report on Form 8-K filed by the Company on November 28, 2016 and is incorporated by reference herein.

### **Item 7.01 Regulation FD Disclosure.**

On October 23, 2017, the Company issued a press release regarding the launch of the Offering. On October 24, 2017, the Company issued a press release announcing that it had priced the Offering. Copies of the press releases are furnished hereto as Exhibits 99.1 and 99.2, respectively, to this Current Report and incorporated herein by reference.

Statements contained in this Current Report on Form 8-K regarding matters that are not historical facts are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements may involve risks and uncertainties, such as statements related to the anticipated closing of the Offering and the amount of proceeds expected from the Offering. The risks and uncertainties involved include the Company’s ability to satisfy certain conditions to closing on a timely basis or at all, as well as other risks detailed from time to time in the Company’s SEC filings, including in its annual filing on Form 10-K filed with the SEC on March 8, 2017, the preliminary prospectus supplement filed with the SEC on October 23, 2017, and the final prospectus supplement to be filed with the SEC.

**Item 9.01 Financial Statements and Exhibits.**

*(d) Exhibits.*

<b>Exhibit No.</b>	<b>Description</b>
1.1	<a href="#"><u>Underwriting Agreement, dated October 24, 2017</u></a>
5.1	<a href="#"><u>Opinion of Lowenstein Sandler LLP</u></a>
23.1	<a href="#"><u>Consent of Lowenstein Sandler LLP (contained in Exhibit 5.1)</u></a>
99.1	<a href="#"><u>Press Release dated October 23, 2017</u></a>
99.2	<a href="#"><u>Press Release dated October 24, 2017</u></a>

**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.

**CORBUS PHARMACEUTICALS HOLDINGS, INC.**

Dated: October 24, 2017

By: /s/ Yuval Cohen

Name: Yuval Cohen

Title: Chief Executive Officer

**Exhibit Index**

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CORBUS PHARMACEUTICALS HOLDINGS, INC.

4,650,000 Shares of Common Stock  
(par value \$0.0001 per share)

Underwriting Agreement

October 24, 2017

Cantor Fitzgerald & Co.

As Representative of the several Underwriters listed in Schedule 1 hereto

499 Park Avenue  
New York, New York 10022

Ladies and Gentlemen:

Corbus Pharmaceuticals Holdings, Inc., a Delaware corporation (the "Company"), proposes to issue and sell to the several underwriters listed in Schedule 1 hereto (the "Underwriters"), for whom Cantor Fitzgerald & Co. is acting as representative (the "Representative"), an aggregate of 4,650,000 shares (the "Underwritten Shares") of Common Stock, par value \$0.0001 per share, of the Company ("Common Stock") and, at the option of the Underwriters, up to an additional 697,500 shares of Common Stock (the "Option Shares"). The Underwritten Shares and the Option Shares are herein referred to as the "Shares". The shares of Common Stock to be outstanding after giving effect to the sale of the Shares are referred to herein as the "Stock".

The Company hereby confirms its agreement with the several Underwriters concerning the purchase and sale of the Shares, as follows:

- 1) Registration Statement The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Securities Act"), a shelf registration statement on Form S-3 (File No. 333-207936), including a base prospectus (the "Base Prospectus") to be used in connection with the public offering and sale of the Shares. Such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it became effective under the Securities Act, including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of effectiveness pursuant to Rule 430A, 430B or 430C under the Securities Act ("Rule 430 Information"), is referred to herein as the "Registration Statement". If the Company has filed an abbreviated registration statement pursuant to Rule 462(b) under the Securities Act (the "Rule 462 Registration Statement"), then any reference herein to the term "Registration Statement" shall be deemed to include such Rule 462 Registration Statement. The preliminary prospectus supplement dated October 23, 2017 describing the Shares and the offering thereof, together with the Base Prospectus, is called the "Preliminary Prospectus," and the Preliminary Prospectus and any other prospectus supplement to the Base Prospectus in preliminary form that describes the Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a "preliminary prospectus." As used herein, the term "Prospectus" shall mean the final prospectus supplement to the Base Prospectus that describes the Shares and the offering thereof (the "Final Prospectus Supplement"), together with the Base Prospectus, in the form first used by the Underwriters to confirm sales of the Shares or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act.

As used herein, "Applicable Time" means 8.30 a.m, New York city time, on October 24, 2017. As used herein, "free writing prospectus" has the meaning set forth in Rule 405 under the Securities Act, and "Time of Sale Prospectus" means the Preliminary Prospectus, as amended or supplemented immediately prior to the Applicable Time, together with the pricing information set forth on Annex A hereto. As used herein, "Road Show" means a "road show" (as defined in Rule 433 under the Securities Act) relating to the offering of the Shares contemplated hereby that is a "written communication" (as defined in Rule 405 under the Securities Act).

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Any reference in this underwriting agreement (this "Agreement") to the Registration Statement, the Rule 462 Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, and all other references of like import, shall be deemed to refer to and include the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act, as of the effective date of the Registration Statement or the Rule 462 Registration Statement or the date of the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time or Sale Prospectus or the Prospectus, as the case may be. Any reference to "amend", "amendment" or "supplement" with respect to the Registration Statement, the Rule 462 Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus shall be deemed to refer to and include any documents filed after such date under the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Exchange Act") that are deemed to be incorporated by reference therein. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement, the Rule 462 Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, as the case may be.

All references in this Agreement to the Registration Statement, the Rule 462 Prospectus, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, or any amendments or supplements to any of the foregoing, shall include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("EDGAR").

2) Purchase of the Shares by the Underwriters.

- a) The Company agrees to issue and sell the Underwritten Shares to the several Underwriters as provided in this Agreement, and the Underwriters agree, severally and not jointly, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees to purchase from the Company the respective number of Underwritten Shares set forth opposite their names on Schedule 1 hereto. The purchase price per share to be paid by the several Underwriters to the Company for the Underwritten Shares will be \$6.58 per share (the "Purchase Price").

In addition, the Company agrees to issue and sell the Option Shares to the several Underwriters as provided in this Agreement, and the Underwriters, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, shall have the option to purchase, severally and not jointly, from the Company the Option Shares at the Purchase Price less an amount per share equal to any dividends or distributions declared by the Company and payable on the Underwritten Shares but not payable on the Option Shares.

If any Option Shares are to be purchased, the number of Option Shares to be purchased by each Underwriter shall be the number of Option Shares which bears the same ratio to the aggregate number of Option Shares being purchased as the number of Underwritten Shares set forth opposite the name of such Underwriter in Schedule 1 hereto (or such number increased as set forth in Section 11 hereof) bears to the aggregate number of Underwritten Shares being purchased from the Company by the several Underwriters, subject, however, to such adjustments to eliminate any fractional Shares as the Representative in its sole discretion shall make.

The Underwriters may exercise the option to purchase Option Shares at any time in whole, or from time to time in part, on or before the thirtieth (30<sup>th</sup>) day following the date of the Prospectus, by written notice from the Representative to the Company. Such notice shall set forth the aggregate number of Option Shares as to which the option is being exercised and the date and time when the Option Shares are to be delivered and paid for, which may be the same date and time as the Closing Date (as hereinafter defined) but shall not be earlier than the Closing Date nor later than the fifth (5<sup>th</sup>) full business day (as hereinafter defined) after the date of such notice (unless such time and date are postponed in accordance with the provisions of Section 11 hereof). Any such notice shall be given at least two (2) business days prior to the date and time of delivery specified therein, unless otherwise agreed by the parties.

- b) The Company understands that the Underwriters intend to make a public offering of the Shares as soon after the effectiveness of this Agreement as in the judgment of the Representative is advisable, and initially to offer the Shares on the terms set forth in the Prospectus. The Company acknowledges and agrees that the Underwriters may offer and sell Shares to or through any affiliate of an Underwriter.
- c) Payment for the Shares shall be made by wire transfer in immediately available funds to the account specified by the Company to the Representative in the case of the Underwritten Shares, at the offices of Covington & Burling LLP, 620 Eighth Avenue, New York, NY 10018 at 9:00 a.m., New York City time, on October 26, 2017, or at such other time or place on the same or such other date, not later than the fifth (5<sup>th</sup>) business day thereafter, as the Representative and the Company may agree upon in writing or, in the case of the Option Shares, on the date and at the time and place specified by the Representative's written notice of its election to purchase such Option Shares. The time and date of such payment for the Underwritten Shares is referred to herein as the "Closing Date", and the time and date for such payment for the Option Shares, if other than the Closing Date, is herein referred to as the "Additional Closing Date".

Payment for the Shares to be purchased on the Closing Date or the Additional Closing Date, as the case may be, shall be made against delivery to the Representative for the respective accounts of the several Underwriters of the Shares to be purchased on such date with any transfer taxes payable in connection with the sale of such Shares duly paid by the Company. Delivery of the Shares shall be made through the facilities of The Depository Trust Company unless the Representative shall otherwise instruct.

- d) The Company acknowledges and agrees that the Underwriters are acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Shares contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. Additionally, neither the Representative nor any other Underwriter is advising the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company shall consult with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Underwriters shall have no responsibility or liability to the Company with respect thereto. Any review by the Underwriters of the Company, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Underwriters and shall not be on behalf of the Company.
- 3) Representations and Warranties of the Company. The Company represents and warrants to each Underwriter that:
- a) *Compliance with Registration Requirements.* The Registration Statement has become effective under the Securities Act. At the time such Registration Statement became effective, the Company met the requirements for use of Form S-3 under the Act. No stop order preventing or suspending the effectiveness of the Registration Statement is in effect and no proceedings for such purpose or pursuant to Section 8A of the Securities Act against the Company or relating to the offering of the Shares have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission.

- b) *Disclosure.* Each of the Registration Statement and any post-effective amendment thereto, at the time it became or becomes effective and at any subsequent time that it is deemed to have become effective as to the Underwriters pursuant to Rule 430B(f)(2) under the Securities Act, complied and will comply in all material respects with the Securities Act and did not and will not contain any 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. Each preliminary prospectus, at the time of filing thereof, complied in all material respects with the applicable requirements of the Securities Act, and no preliminary prospectus, at the time of filing thereof, contained any untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of the Applicable Time, at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, and at the Closing Date (as defined below), the Time of Sale Prospectus, as amended or supplemented by the Company, if applicable, did not and will not contain any 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. The Prospectus, as of its date and (as then amended or supplemented) as of the Closing Date and any Additional Closing Date, and as of any date during the Prospectus Delivery Period, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the four immediately preceding sentences do not apply to statements in or omissions from the Registration Statement or any post-effective amendment thereto, the Time of Sale Prospectus or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with any Underwriter Information (as defined below). There are no contracts or other documents required to be described in the Time of Sale Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement which have not been described or filed as required. Each preliminary prospectus, if filed by electronic transmission pursuant to the Commission's Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"), was identical (except as may be permitted by Regulation S-T under the Securities Act) to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Shares.
- c) *Free Writing Prospectus.* Other than the Registration Statement, the Preliminary Prospectus and the Prospectus, the Company (including its agents and representatives, other than the Underwriters in their capacity as such) has not prepared, used, authorized, approved or referred to and will not prepare, use, authorize, approve or refer to any "written communication" (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or solicitation of an offer to buy the Shares other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) each electronic road show.
- d) *Emerging Growth Company.* From the time of the initial filing of the Registration Statement with the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a)(19) of the Securities Act (an "Emerging Growth Company").
- e) *Testing-the-Waters Materials.* The Company (i) has not alone engaged in, distributed or approved any Testing-the-Waters Communications and (ii) has not authorized anyone to engage in Testing-the-Waters Communications. "Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

- f) *Incorporated Documents.* The documents incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, when they were filed with the Commission, conformed in all material respects to the requirements of the Exchange Act, and none of such documents contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and will not contain any 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.
- g) *Financial Statements.* The financial statements (including the related notes thereto) of the Company and its consolidated subsidiaries included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus, comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly in all material respects the financial position of the Company and its consolidated subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods covered thereby, except in the case of any unaudited financial statements, which are subject to normal year-end adjustments and do not contain certain footnotes as permitted by the applicable rules of the Commission, and any supporting schedules included or incorporated by reference in the Registration Statement present fairly in all material respects the information required to be stated therein; and the other financial information included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus has been derived from the accounting records of the Company and its consolidated subsidiaries and presents fairly the information shown thereby.
- h) *No Material Adverse Change.* Since the date of the most recent financial statements of the Company included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) there has not been any change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Registration Statement, the Time of Sale Prospectus and the Prospectus), short-term debt or long-term debt of the Company or any of its subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development that could reasonably be expected to result in a prospective material adverse change, in or affecting the business, properties, management, financial position, prospects, shareholders’ equity or results of operations of the Company and its subsidiaries taken as a whole; (ii) neither the Company nor any of its subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) or incurred any liability or obligation, direct or contingent; and (iii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its business that is material to the Company and its subsidiaries taken as a whole and that is either from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, except in each of clauses (i)-(iii) as otherwise disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus.
- i) *Organization and Good Standing.* The Company and each of its subsidiaries have been duly organized and are validly existing and in good standing (or jurisdictional equivalent) under the laws of their respective jurisdictions of organization, are duly qualified to do business and are in good standing in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification, and have all corporate power and authority necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the failure to be so qualified or in good standing or have such power or authority could not reasonably be expected, individually or in the aggregate, to have a material adverse effect on the business, properties, management, financial position, prospects, shareholders’ equity or results of operations of the Company and its subsidiaries taken as a whole or on the performance by the Company of its obligations under this Agreement (a “Material Adverse Effect”). The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21.1 to its Annual Report on Form 10-K for the year ended December 31, 2016.

- j) *Capitalization.* The Company has an authorized capitalization as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus under the heading “Description of Capital Stock”; all the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights that have not been duly waived or satisfied; except as described in or expressly contemplated by the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company or any of its wholly owned subsidiaries, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company or any of its wholly owned subsidiaries, any convertible or exchangeable securities or any rights, warrants or options; the capital stock of the Company conforms in all material respects to the descriptions thereof contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and all the outstanding shares of capital stock or other equity interests of each subsidiary described in the Registration Statement, the Time of Sale Prospectus or the Prospectus as owned, directly or indirectly, by the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of any lien, charge, encumbrance, security interest, restriction on voting or transfer or any other claim of any third party.
- k) *Stock Options.* With respect to the outstanding stock options (the “Stock Options”) granted pursuant to the stock-based compensation plans of the Company and its subsidiaries (the “Company Stock Plans”), (i) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required shareholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto; (ii) each such grant was made in all material respects in accordance with the terms of the Company Stock Plans, Exchange Act and all applicable laws and regulatory rules or requirements, including the rules of The Nasdaq Capital Market (the “NASDAQ”) and any other exchange on which the Company’s securities are traded, to the extent applicable; and (iii) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- l) *Due Authorization.* The Company has full corporate right, power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and all corporate action required to be taken for the due and proper authorization, execution and delivery by it of this Agreement and the consummation by it of the transactions contemplated hereby has been duly and validly taken.

- m) *Underwriting Agreement.* This Agreement has been duly authorized, executed and delivered by the Company.
- n) *The Shares.* The Shares to be issued and sold by the Company hereunder have been duly authorized and, when issued and delivered and paid for as provided herein, will be duly and validly issued, will be fully paid and nonassessable and will conform to the descriptions thereof in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights that have not been duly waived.
- o) *No Violation or Default.* Neither the Company nor any of its subsidiaries is (i) in violation of its charter or bylaws or similar organizational documents; (ii) 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 or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party, by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject (collectively, “Company Contracts”); or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that could not, individually or in the aggregate, have a Material Adverse Effect. To the knowledge of the Company, all third parties that are parties to any Company Contracts are in compliance with the terms, covenants and conditions contained in such Company Contracts, except for any violation that could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- p) *No Conflicts.* The execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares by the Company and the consummation by the Company of the transactions contemplated by this Agreement will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party, by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject; (ii) result in any violation of the provisions of the charter or by-laws or similar organizational documents of the Company or any of its subsidiaries; or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation or default that could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- q) *No Consents Required.* No consent, approval, authorization, order, license, registration or qualification of or with any court or arbitrator or governmental or regulatory authority is required for the execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares and the consummation of the transactions contemplated by this Agreement, except for the registration of the Shares under the Securities Act and such consents, approvals, authorizations, orders and registrations or qualifications as may be required by the Financial Industry Regulatory Authority, Inc. (“FINRA”), the NASDAQ, and under applicable state securities laws in connection with the purchase and distribution of the Shares by the Underwriters.
- r) *Legal Proceedings.* Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no legal, governmental or regulatory investigations, actions, suits or proceedings pending to which the Company or any of its subsidiaries is a party or to which any property of the Company or any of its subsidiaries is the subject, including any proceeding before the United States Food and Drug Administration of the U.S. Department of Health and Human Services (the “FDA”) or comparable federal, state, local or foreign governmental and regulatory authorities (“Governmental Authority”) relating to an alleged failure to comply, or deficiency in compliance, with the requirements of the FDA or other Governmental Authority that, individually or in the aggregate, if determined adversely to the Company or any of its subsidiaries, could reasonably be expected to have a Material Adverse Effect; to the knowledge of the Company, no such investigations, actions, suits or proceedings are threatened or contemplated by any governmental or regulatory authority or threatened by others; and (i) there are no current or pending legal, governmental or regulatory actions, suits or proceedings that are required under the Securities Act to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus that are not so described in the Registration Statement, the Time of Sale Prospectus and the Prospectus and (ii) there are no statutes, regulations or contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, the Time of Sale Prospectus or the Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

- s) *Independent Accountants.* EisnerAmper LLP, who have certified certain financial statements of the Company and its subsidiaries, is an independent registered public accounting firm with respect to the Company and its subsidiaries within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act.
- t) *Title to Real and Personal Property.* The Company owns no real property, and the Company and its subsidiaries have valid rights to lease or otherwise use all items of real and personal property that are material to the respective businesses of the Company and its subsidiaries, in each case free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company and its subsidiaries or (ii) would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.
- u) *Intellectual Property.* The Company and its subsidiaries own, or have obtained valid and enforceable licenses for, the inventions, patent applications, patents, trademarks, trade names, service names, copyrights, trade secrets and other intellectual property (1) described in the Registration Statement, the Time of Sale Prospectus or the Prospectus as being owned or licensed by them or (2) which, to their knowledge, are necessary for the conduct of their respective businesses as currently conducted or as currently proposed in the Registration Statement, the Time of Sale Prospectus or the Prospectus to be conducted (collectively, “Intellectual Property”) except in the case of clause (2) where the failure to own, possess or acquire such rights could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or as could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, to the Company’s knowledge: (i) there are no third parties who have rights to any Intellectual Property, except for Intellectual Property rights which are licensed by the Company from or granted by the Company to its partners, licensors and licensees and customary reversionary rights of third-party licensors with respect to Intellectual Property that is licensed to the Company or one or more of its subsidiaries; and (ii) there is no infringement by third parties of any Intellectual Property. Except as could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, 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 any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that the Company or any of its subsidiaries infringes or otherwise violates, or would, upon the commercialization of any product or service described in the Registration Statement, the Time of Sale Prospectus or the Prospectus as under development, infringe or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. Except as could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, the Company and its subsidiaries have complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or any subsidiary, and all such agreements are in full force and effect. The product candidates described in the Registration Statement, the Time of Sale Prospectus or the Prospectus as under development by the Company or any subsidiary fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company or any subsidiary.

- v) *FDA and Healthcare Compliance.* Except as described in the Registration Statement, the Pricing Time of Sale Prospectus and the Prospectus, and except where such noncompliance would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, the Company: (i) is and at all times has been in compliance with all statutes, rules and regulations of the FDA and other Governmental Authority applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any product under development, manufactured or distributed by the Company, including, without limitation, the federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 et seq., the Controlled Substances Act, 21 U.S.C. § 801 et. seq., the False Claims Act, 31 U.S.C. §§ 3729-3733, the Health Insurance Portability and Accountability Act, and the Health Information Technology for Economic and Clinical Health Act (collectively, “Applicable FDA Laws”); (ii) to the knowledge of the Company, has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any Governmental Authority alleging or asserting material noncompliance with any Applicable FDA Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable FDA Laws (“Authorizations”); (iii) possesses all Authorizations and the Company is in compliance with the terms of such Authorizations; (iv) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any Governmental Authority or third party alleging that any product, operation or activity is in material violation of any Applicable FDA Laws or Authorizations and has no knowledge that the FDA or any Governmental Authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) has not received notice that the FDA or any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any Governmental Authority is considering such action; and (vi) has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable FDA Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).
- w) *Clinical Studies.* The studies, tests and preclinical and clinical trials conducted by or, to the Company’s knowledge, on behalf of the Company that are described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus or the Prospectus, as applicable, were and, if still ongoing, are being conducted in all material respects in accordance with Applicable FDA Laws; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus are, to the Company’s knowledge, accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test or trial results described or referred to in the Registration Statement, the Time of Sale Prospectus or the Prospectus when viewed in the context in which such results are described and the clinical state of development; and, except to the extent disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company has not received any notices or correspondence from the FDA or any Governmental Authority requiring the termination or suspension of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company that are described in the Registration Statement, the Time of Sale Prospectus or the Prospectus or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus or the Prospectus, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials.

- x) *No Undisclosed Relationships.* No relationship, direct or indirect, exists between or among the Company or any of its subsidiaries, on the one hand, and the directors, officers, shareholders, customers or suppliers of the Company, or any of its subsidiaries or any other related party, on the other, that is required by the Securities Act to be described in the Registration Statement, the Time of Sale Prospectus and the Prospectus that has not been described as required.
- y) *Investment Company Act.* The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, will not be required to register as an “investment company” or an entity “controlled” by an “investment company” within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder (the “Investment Company Act”).
- z) *Taxes.* The Company and its subsidiaries have timely filed all material tax returns that are required to have been filed by them pursuant to applicable state, local or foreign law, and have paid all taxes shown thereon or otherwise assessed, which are due and payable, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided; and except as otherwise disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there is no material tax deficiency that has been, or would reasonably be expected to be, asserted against the Company or any of its subsidiaries or any of their respective properties or assets.
- aa) *Licenses and Permits.* The Company and its subsidiaries possess all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus (including, without limitation, those administered by the FDA, the U.S. Drug Enforcement Administration or by any other Governmental Authority), except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect; and except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course, except where such revocation, modification or nonrenewal would not reasonably be expected to have a Material Adverse Effect.
- bb) *No Labor Disputes.* No labor disturbance by or dispute with employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is threatened, and to the knowledge of the Company, there is no existing or imminent labor disturbance by, or dispute with, the employees of any of its or its subsidiaries’ principal suppliers, contractors or customers, except as would not, individually or in the aggregate, have a Material Adverse Effect.

- cc) *Compliance with and Liability under Environmental Laws.* (i) The Company and its subsidiaries (a) are, and, during the past five years, were, in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, requirements, decisions, judgments, decrees, orders and the common law relating to pollution or the protection of the environment, natural resources or human health or safety, including those relating to the generation, storage, treatment, use, handling, transportation, Release (as defined below) or threat of Release of Hazardous Materials (as defined below) (collectively, “Environmental Laws”), (b) have received and are in compliance with all permits, licenses, certificates or other authorizations or approvals required of them under applicable Environmental Laws to conduct their respective businesses, (c) have not received notice of any actual or potential liability under or relating to, or actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any Release or threat of Release of Hazardous Materials, and have no knowledge of any event or condition that would reasonably be expected to result in any such notice, (d) are not conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to any Environmental Law at any location, and (e) are not a party to any order, decree or agreement that imposes any obligation or liability under any Environmental Law; and (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company or its subsidiaries, except in the case of each of (i) and (ii) above, for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and (iii) except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (a) there are no proceedings that are pending, or that are known by the Company to be contemplated, against the Company or any of its subsidiaries under any Environmental Laws in which a governmental entity 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 against the Company or any of its subsidiaries, (b) to the knowledge of the Company, there are no facts or issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws, including the Release or threat of Release of Hazardous Materials, that would reasonably be expected to have a Material Adverse Effect, and (c) none of the Company or any of its subsidiaries anticipates material capital expenditures relating to any Environmental Laws.
- dd) *Regulatory Compliance.* Other than those FDA and healthcare compliance matters that are addressed in Section 3(v) hereof, and except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, to the knowledge of the Company, all third parties that are collaborating with the Company (i) are in material compliance with all applicable statutes, rules and regulations of the applicable regulatory authorities (collectively, “Applicable Laws”) and (ii) have not received any notice of adverse finding, warning letter, untitled letter or other correspondence or notice from any regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws, in either case of (i) or (ii) above, solely related to products being developed in collaboration with the Company.
- ee) *Hazardous Materials.* To the knowledge of the Company, there has been no storage, generation, transportation, use, handling, treatment, Release (as defined below) or threat of Release of Hazardous Materials (as defined below) by, relating to or caused by the Company or any of its subsidiaries (or, to the knowledge of the Company and its subsidiaries, any other entity (including any predecessor) for whose acts or omissions the Company or any of its subsidiaries is or would reasonably be expected to be liable) at, on, under or from any property or facility now or, to the knowledge of the Company, previously owned, operated or leased by the Company or any of its subsidiaries, or, to the knowledge of the Company, at, on, under or from any other property or facility, in violation of any Environmental Laws or in a manner or amount or to a location that would reasonably be expected to result in any liability under any Environmental Law, except for any violation or liability which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. “Hazardous Materials” means any material, chemical, substance, waste, pollutant, contaminant, compound, mixture, or constituent thereof, in any form or amount, including petroleum (including crude oil or any fraction thereof) and petroleum products, natural gas liquids, asbestos and asbestos containing materials, naturally occurring radioactive materials, brine, and drilling mud, which is regulated or which can give rise to liability under any Environmental Law. “Release” means any spilling, leaking, seepage, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, depositing, dispersing, or migrating in, into or through the environment, or in, into, from or through any building or structure.

- ff) *Compliance with ERISA.* Except, in each case, for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (i) each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income 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(b), (c), (m) or (o) 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 the requirements of any applicable statutes, orders, rules and regulations, including but not limited to 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) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, the minimum funding standard of Section 412 of the Code or Section 302 of ERISA, as applicable, has been satisfied (without taking into account any waiver thereof or extension of any amortization period) and to the knowledge of the Company is reasonably expected to be satisfied in the future (without taking into account any waiver thereof or extension of any amortization period); (iv) the fair market value of the assets of each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan); (v) no “reportable event” (within the meaning of Section 4043(c) of ERISA) has occurred or to the knowledge of the Company is reasonably expected to occur; (vi) neither the Company nor any member of the Controlled Group has incurred, nor to the knowledge of the Company 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 (the “PBGC”), in the ordinary course and without default) in respect of a Plan (including a “multiemployer plan”, within the meaning of Section 4001(a)(3) of ERISA); and (vii) to the knowledge of the Company, there is no pending audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the PBGC or any other governmental agency or any foreign regulatory agency with respect to any Plan. None of the following events has occurred or, to the knowledge of the Company, is reasonably likely to occur: (x) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company or its subsidiaries in the current fiscal year of the Company and its subsidiaries compared to the amount of such contributions made during the Company and its subsidiaries’ most recently completed fiscal year; or (y) an increase that is material to the Company and its subsidiaries, taken as a whole, in the Company and its subsidiaries’ “accumulated post-retirement benefit obligations” (within the meaning of Statement of Financial Accounting Standards 106) compared to the amount of such obligations in the Company and its subsidiaries’ most recently completed fiscal year.
- gg) *Disclosure Controls.* The Company and its subsidiaries maintain an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the Exchange Act) that complies in all material respects with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure.

- hh) *Accounting Controls.* The Company and its subsidiaries maintain systems of “internal control over financial reporting” (as defined in Rule 13a-15(f) of the Exchange Act) that have been designed to comply in all material respects with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (1) transactions are executed in accordance with management’s general or specific authorizations; (2) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (3) access to assets is permitted only in accordance with management’s general or specific authorization; (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (5) interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and is prepared in accordance with the Commission’s rules and guidelines applicable thereto. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no material weaknesses in the Company’s internal control over financial reporting. The Company’s auditors and the audit committee of the board of directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which have adversely affected or are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.
- ii) *eXtensible Business Reporting Language.* The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.
- jj) *Insurance.* The Company and its subsidiaries have insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as the Company reasonably believes are adequate to protect the Company and its subsidiaries and their respective businesses; and neither the Company nor any of its subsidiaries has (i) 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 or (ii) any 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 at reasonable cost from similar insurers as may be necessary to continue its business in all material respects.
- kk) *No Unlawful Payments.* Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person authorized to act on behalf of the Company or any of its subsidiaries has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, agreed to or requested any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company and its subsidiaries have instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote and ensure compliance with all applicable anti-bribery and anti-corruption laws.

- ll) *Compliance with Anti-Money Laundering Laws.* The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions where the Company or any of its subsidiaries conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the “Anti-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 or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.
- mm) *No Conflicts with Sanctions Laws.* None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person associated with or authorized to act on behalf of the Company or any of its subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. government (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State and including, without limitation, the designation as a “specially designated national” or “blocked person”), the United Nations Security Council, the European Union, Her Majesty’s Treasury or other relevant sanctions authority (collectively, “Sanctions”), nor is the Company or any of its subsidiaries located, organized or resident in a country or territory that is the subject or target of Sanctions, including, without limitation, Burma/Myanmar, Cuba, Iran, North Korea, Sudan, Syria and the Crimea region of Ukraine (each, a “Sanctioned Country”); and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five years, the Company and its subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.
- nn) *No Restrictions on Subsidiaries.* Except as prohibited by law, no wholly owned subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such wholly owned subsidiary’s capital stock, from repaying to the Company any loans or advances to such wholly owned subsidiary from the Company or from transferring any of such wholly owned subsidiary’s properties or assets to the Company or any other subsidiary of the Company.
- oo) *No Broker’s Fees.* Neither the Company nor any of its subsidiaries is a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against the Company or any of its subsidiaries or any Underwriter for a brokerage commission, finder’s fee or like payment in connection with the offering and sale of the Shares.

- pp) *No Registration Rights.* Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, no person has the right to require the Company or any of its subsidiaries to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Shares, except for such rights that have been waived.
- qq) *No Stabilization.* Neither the Company nor any of its subsidiaries, nor any of their respective directors, officers or controlling persons, has taken, directly or indirectly, any action that has constituted or is designed to or that would reasonably be expected to cause or result in, under the Exchange Act or otherwise, any stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares, including any stabilization or manipulation of the price of the Shares.
- rr) *Margin Rules.* The application of the proceeds received by the Company from the issuance, sale and delivery of the Shares as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus will not violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.
- ss) *Forward-Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.
- tt) *Statistical and Market Data.* Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.
- uu) *Sarbanes-Oxley Act.* There is and has been no failure on the part of the Company or, to the knowledge of the Company, any of the Company's directors or officers, in their capacities as such, to comply with any applicable provision of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated in connection therewith, including Section 402 related to loans and Sections 302 and 906 related to certifications.
- vv) *[Reserved.]*
- ww) *Stock Exchange Listing.* The Shares are registered pursuant to Section 12(b) or 12(g) of the Exchange Act and are listed on the NASDAQ, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Shares under the Exchange Act or delisting the Shares from the NASDAQ, nor has the Company received any notification that the Commission or the NASDAQ is contemplating terminating such registration or listing. To the Company's knowledge, it is in compliance with all applicable listing requirements of the NASDAQ.
- xx) *No Contract Termination.* The Company has not sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements referred to or described in the Time of Sale Prospectus, any preliminary prospectus or the Prospectus, or referred to or described in, or filed as an exhibit to, the Registration Statement, and no such termination or non-renewal has been threatened by the Company or, to the Company's knowledge, any other party to any such contract or agreement, which threat of termination or non-renewal has not been rescinded as of the date hereof.

- 4) Further Agreements of the Company. The Company covenants and agrees with each Underwriter that:
- a) *Required Filings.* The Company will file the final Prospectus with the Commission within the time periods specified by Rule 424(b) and Rule 430A, 430B or 430C under the Securities Act and will furnish copies of the Prospectus (to the extent not previously delivered) to the Underwriters in New York City prior to 10:00 A.M., New York City time, on the business day next succeeding the date of this Agreement in such quantities as the Representative may reasonably request. The Company will pay the registration fee for this offering within the time period required by Rule 456(b)(1) under the Securities Act (without giving effect to the proviso therein) and in any event prior to the Closing Date.
  - b) *Delivery of Copies.* The Company will deliver, without charge, to the Representative, (i) at the request of the Representative, two (2) signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith and documents incorporated by reference therein; and (ii) to each Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and documents incorporated by reference therein) as the Representative may reasonably request. As used herein, the term "Prospectus Delivery Period" means such period of time after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters a prospectus relating to the Shares is required by law to be delivered (or required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Shares by the any Underwriter or dealer.
  - c) *Amendments or Supplements.* Before filing any amendment or supplement to the Registration Statement or the Prospectus, whether before or after the time that the Registration Statement becomes effective, the Company will furnish to the Representative and counsel for the Underwriters a copy of the proposed amendment or supplement for review and will not prepare, use, authorize, approve, refer to or file any such proposed amendment or supplement to which the Representative reasonably objects.
  - d) *Notice to the Representative.* The Company will advise the Representative promptly, and confirm such advice in writing, (i) when the Registration Statement has become effective; (ii) when any amendment to the Registration Statement has been filed or becomes effective; (iii) when any supplement or amendment to the Prospectus has been filed or distributed; (iv) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information; (v) of the issuance by the Commission of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of the Preliminary Prospectus, the Time of Sale Prospectus or the Prospectus or the initiation or, to the knowledge of the Company, threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (vi) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus or the Time of Sale Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus or the Time of Sale Prospectus is delivered to a purchaser, not misleading; (vii) of the receipt by the Company of any notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(2) under the Securities Act; and (viii) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Shares for offer and sale in any jurisdiction or the initiation or, to the knowledge of the Company, threatening of any proceeding for such purpose; and the Company will use its commercially reasonable best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of the Preliminary Prospectus, the Time of Sale Prospectus or the Prospectus or suspending any such qualification of the Shares and, if any such order is issued, will obtain as soon as possible the withdrawal thereof.

- e) *Ongoing Compliance.* (i) If during the Prospectus Delivery Period (A) any event or development shall occur or condition shall exist as a result of which the Prospectus as then amended or supplemented would include any 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 existing when the Prospectus is delivered to a purchaser, not misleading or (B) it is necessary to amend or supplement the Prospectus to comply with law, the Company will as soon as practicable, but in no event later than one (1) business day, notify the Underwriters thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission and furnish to the Underwriters and to such dealers as the Representative may designate such amendments or supplements to the Prospectus (or any document to be filed with the Commission and incorporated by reference therein) as may be necessary so that the statements in the Prospectus as so amended or supplemented (or any document to be filed with the Commission and incorporated by reference therein) will not, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law and (ii) if at any time prior to the Closing Date (A) any event or development shall occur or condition shall exist as a result of which the Time of Sale Prospectus as then amended or supplemented would include any 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 existing when the Time of Sale Prospectus is delivered to a purchaser, not misleading or (B) it is necessary to amend or supplement the Time of Sale Prospectus to comply with law, the Company will immediately notify the Underwriters thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission (to the extent required) and furnish to the Underwriters and to such dealers as the Representative may designate such amendments or supplements to the Time of Sale Prospectus (or any document to be filed with the Commission and incorporated by reference therein) as may be necessary so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances existing when the Time of Sale Prospectus is delivered to a purchaser, be misleading or so that the Time of Sale Prospectus will comply with applicable law.
- f) *Blue Sky Compliance.* The Company will use its commercially reasonable efforts to qualify the Shares for offer and sale under the securities or blue sky laws of such jurisdictions as the Representative shall reasonably request and will continue such qualifications in effect so long as required for distribution of the Shares; provided that the Company shall not be required to (i) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (ii) file any general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject.
- g) *Earning Statement.* The Company will make generally available to its security holders and the Representative as soon as practicable an earning statement that satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least twelve (12) months beginning with the first fiscal quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement, it being understood and agreed that such earning statement shall be deemed to have been made available by the Company if the Company is in compliance with its reporting obligations pursuant to the Exchange Act, if such compliance satisfies the conditions of Rule 158, and if such earning statement is made available on EDGAR.

- h) *Clear Market.* For a period of ninety (90) days after the date of the Prospectus, the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or file with the Commission a registration statement under the Securities Act relating to, any shares of Stock or any securities convertible into or exercisable or exchangeable for Stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing (other than filings on Form S-8 relating to Company Stock Plans that are in existence at the Applicable Time and disclosed in the Prospectus); or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise, without the prior written consent of the Representative, other than (A) the Shares to be sold hereunder, (B) any shares of Stock of the Company issued upon the exercise of options granted under the Company Stock Plans, (C) any shares of Stock of the Company issued upon the exercise of warrants outstanding on the date of the Prospectus, (D) sales of shares pursuant to the Company's employee stock purchase plan and grants of equity awards granted under Company Stock Plans, in each case as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, and (E) the issuance, in connection with mergers or acquisitions of businesses, entities, property or other assets, joint ventures or strategic alliances, of shares of Common Stock (the shares referred to in clause (E) and so issued, the "Carveout Shares") not exceeding in the aggregate, after giving effect to any such issuance, that number of shares equal to five percent (5%) of the Company's outstanding shares of Common Stock, provided that the Company shall cause each such recipient of Carveout Shares to execute and deliver to the Representative a lock-up agreement substantially in the form of Exhibit A hereto for the balance of the 90-day restricted period.
- i) *Use of Proceeds.* The Company will apply the net proceeds from the sale of the Shares as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus under the heading "Use of Proceeds".
- j) *No Stabilization.* Neither the Company nor any of its subsidiaries, nor any of their respective directors, officers or controlling persons, will take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in, under the Exchange Act or otherwise, any stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Stock, including any stabilization or manipulation of the price of the Stock.
- k) *Exchange.* The Company will cause the Shares to be listed, subject to notice of issuance, on the NASDAQ.
- l) *Reports.* For a period of three (3) years from the date of this Agreement, the Company will furnish to the Representative, as soon as commercially reasonable after the date they are available, copies of all reports or other communications (financial or other) furnished to holders of the Shares, and copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange or automatic quotation system; provided the Company will be deemed to have furnished such reports and financial statements to the Representative to the extent they are filed on EDGAR.
- m) *Filings.* The Company will file with the Commission such reports as may be required by Rule 463 under the Securities Act.
- n) *Investment Company.* The Company will not invest, or otherwise use the proceeds received by the Company from its sale of the Shares in such a manner as would require the Company to register as an investment company under the Investment Company Act.

- o) *Transfer Agent.* The Company will maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock.
  - p) *Lock-up Agreements.* The Company has caused each officer and director of the Company to furnish to the Representative, on or prior to the date of this Agreement, a “lock-up” agreement, each substantially in the form of Exhibit A hereto.
  - q) *Emerging Growth Company.* The Company will promptly notify the Underwriters if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of Shares within the meaning of the Securities Act and (ii) completion of the 90-day restricted period referred to in Section 4(h) hereof.
- 5) Certain Agreements of the Underwriters. Each Underwriter severally and not jointly covenants with the Company not to take any action that would result in the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not, but for such actions, be required to be filed by the Company under Rule 433(d).
- 6) Conditions of Underwriters’ Obligations. The obligation of each Underwriter to purchase the Underwritten Shares on the Closing Date or the Option Shares on the Additional Closing Date, as the case may be, as provided herein is subject to the performance by the Company of its covenants and other obligations hereunder and to the following additional conditions:
- a) *Registration Compliance; No Stop Order.* No order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose, pursuant to Rule 401(g)(2) or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission; the Prospectus shall have been timely filed with the Commission under the Securities Act and in accordance with Section 4(a) hereof; and all requests by the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representative. FINRA shall have raised no objection to the terms of this offering and the amount of compensation allowable or payable to the Underwriters as described in the Prospectus.
  - b) *Representations and Warranties; Covenants.* The representations and warranties of the Company contained herein shall be true and correct in all material respects on the date hereof and on and as of the Closing Date or the Additional Closing Date, as the case may be; and the statements of the Company and its officers made in any certificates delivered pursuant to this Agreement shall be true and correct in all material respects on and as of the Closing Date or the Additional Closing Date, as the case may be. The Company shall have performed and complied in all material respects with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied in all material respects with by the Company on or before the Closing Date or the Additional Closing Date, as the case may be.
  - c) *No Material Adverse Change.* No event or condition of a type described in Section 3(h) hereof shall have occurred or shall exist, which event or condition is not described in the Time of Sale Prospectus (excluding any amendment or supplement thereto) and the Prospectus (excluding any amendment or supplement thereto) and the effect of which in the judgment of the Representative makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated by this Agreement, the Time of Sale Prospectus and the Prospectus.
  - d) *Officers’ Certificate.* The Representative shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, a certificate of the chief financial officer or chief accounting officer of the Company and one additional senior executive officer of the Company who is reasonably satisfactory to the Representative (i) confirming that such officers have carefully reviewed the Registration Statement, the Time of Sale Prospectus and the Prospectus and, to the knowledge of such officers, the representations of the Company in this Agreement are true and correct in all material respects and that the Company has complied in all material respects with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date or the Additional Closing Date, as the case may be, and (ii) to the effect set forth in paragraphs (a) and (c) above.

e) *Comfort Letters.*

- (i) On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, EisnerAmper LLP shall have furnished to the Representative, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus; provided, that the letter delivered on the Closing Date or the Additional Closing Date, as the case may be, shall use a "cut-off" date no more than three (3) business days prior to such Closing Date or such Additional Closing Date, as the case may be.
  - (ii) On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, if requested by the Representative, the Company shall have furnished to the Representative a certificate, dated the respective dates of delivery thereof and addressed to the Underwriters, of its chief financial officer with respect to certain financial data contained in the Time of Sale Prospectus and the Prospectus, providing "management comfort" with respect to such information, in form and substance reasonably satisfactory to the Representative.
- f) *Opinion and 10b-5 Statement of Counsel for the Company.* Lowenstein Sandler LLP, counsel for the Company, shall have furnished to the Representative, at the request of the Company, its written opinion and 10b-5 statement, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representative.
- g) *Intellectual Property Opinion of Counsel for the Company.* Clark & Elbing LLP, intellectual property counsel for the Company, shall have furnished to the Representative, at the request of the Company, its written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, covering certain intellectual property matters in form and substance reasonably satisfactory to the Representative.
- h) *Opinion and 10b-5 Statement of Counsel for the Underwriters.* The Representative shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, an opinion and 10b-5 statement of Covington & Burling LLP, counsel for the Underwriters, with respect to such matters as the Representative may reasonably request, and such counsel shall have received such documents and information as they may reasonably request to enable them to pass upon such matters.
- i) *No Legal Impediment to Issuance.* No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date or the Additional Closing Date, as the case may be, prevent the issuance or sale of the Shares; and no injunction or order of any federal, state or foreign court shall have been issued that would, as of the Closing Date or the Additional Closing Date, as the case may be, prevent the issuance or sale of the Shares.

- j) *Good Standing.* The Representative shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, satisfactory evidence of the good standing of the Company and its subsidiaries in their respective jurisdictions of organization and their good standing as foreign entities in such other jurisdictions as the Representative may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.
- k) *Exchange Listing.* The Shares to be delivered on the Closing Date or Additional Closing Date, as the case may be, shall have been approved for listing on the NASDAQ, subject to official notice of issuance.
- l) *Lock-up Agreements.* The “lock-up” agreements, each substantially in the form of Exhibit A hereto, between the Representative and the officers and directors of the Company listed on Exhibit B relating to sales and certain other dispositions of shares of Stock or certain other securities, delivered to the Representative on or before the date hereof, shall be in full force and effect on the Closing Date or Additional Closing Date, as the case may be.
- m) *Additional Documents.* On or prior to the Closing Date or the Additional Closing Date, as the case may be, the Company shall have furnished to the Representative such further certificates and documents as the Representative may reasonably request.

All opinions, letters, certificates and evidence 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.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Representative by notice from the Representative to the Company at any time on or prior to the Closing Date and, with respect to the Option Shares, at any time on or prior to the applicable Additional Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 7 and Section 10 hereof shall at all times be effective and shall survive such termination.

7) Indemnification and Contribution

- a) *Indemnification of the Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates and their respective partners, members, directors, officers, employees and agents and each person, if any, who controls the Underwriter or any affiliate within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act as follows:
  - (i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading, or arising out of any untrue statement or alleged untrue statement of a material fact included in the Preliminary Prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

- (ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 7(d) hereof) any such settlement is effected with the written consent of the Company, which consent shall not unreasonably be delayed, conditioned or withheld; and
- (iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission (whether or not a party), to the extent that any such expense is not paid under (i) or (ii) above.

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made solely in reliance upon and in conformity with any Underwriter Information (as defined below).

- b) *Indemnification of the Company.* Each Underwriter agrees to indemnify and hold harmless the Company and its directors and each officer of the Company who signed 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 against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 7(a) hereof, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto) or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with information relating to such Underwriter and furnished to the Company in writing by such Underwriter through the Representative expressly for use therein. The Company hereby acknowledges that the only information that has been furnished to the Company by any Underwriter expressly for use in the Registration Statement or the Prospectus (or any amendment or supplement thereto) are the statements set forth in the sentences relating to the concession to certain dealers and, if applicable, the reallocation to certain brokers and dealers, each in the first paragraph under the caption “Underwriting—Commission and Expenses,” the first and third sentences of the second paragraph, the third paragraph, the fourth paragraph, and the first, second and fifth sentences of the fifth paragraph under the caption “Underwriting—Market Making, Stabilization and other Transactions,” and the first sentence of the first paragraph under the caption “Underwriting—Passive Market Making” in the Preliminary Prospectus and the Prospectus (such information, the “Underwriter Information”).
- c) *Procedure.* Any party that proposes to assert the right to be indemnified under this Section 7 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 7, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 7 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 7 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. Upon request of the indemnified party, the indemnifying party shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party that the indemnified party may designate in such proceeding and shall pay the actual and reasonable fees and disbursements of such counsel related to such proceeding as incurred. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action or counsel satisfactory to the indemnified party, in each case, within a reasonable time after receiving notice of the commencement of the action; in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction (plus local counsel) at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly as they are incurred. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 7 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent (A) includes an express, full and unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (B) 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.

- d) *Settlement Without Consent if Failure to Reimburse.* If an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for reasonable fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 7(a)(ii) hereof effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.
- e) *Contribution.* In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 7 is applicable in accordance with its terms but for any reason is held to be unavailable to the Company or the Underwriters, the Company and the Underwriters will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than the Underwriters, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and the Underwriters may be subject 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 hand. The relative benefits received by the Company on the one hand and the Underwriters on the other hand shall be deemed to be in the same proportion as the total net proceeds from the sale of the Shares (before deducting expenses) received by the Company to the total compensation received by the Underwriters (before deducting expenses) from the sale of Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, with respect to the statements or omissions that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, 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 7(e) were to be determined by pro rata allocation 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, liability, expense or damage, or action in respect thereof, referred to above in this Section 7(e) shall be deemed to include, for the purpose of this Section 7(e), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 7(c) hereof. Notwithstanding the foregoing provisions of this Section 7(e), no Underwriter shall be required to contribute any amount in excess of the commissions received by such Underwriter under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 7(e), any person who controls a party to this Agreement within the meaning of the Securities Act, any affiliates of the respective Underwriters and any officers, directors, partners, employees or agents of the Underwriters or their respective affiliates, will have the same rights to contribution as that party, and each director of the Company and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 7(e), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 7(e) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 7(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 7(c) hereof.
- f) *Non-Exclusive Remedies.* The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.
- 8) Effectiveness of Agreement. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

9) Termination. This Agreement may be terminated in the absolute discretion of the Representative, by notice to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date or, in the case of the Option Shares, prior to the Additional Closing Date (i) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange, the American Stock Exchange or the NASDAQ; (ii) trading of any securities issued or guaranteed by the Company shall have been suspended on any exchange or in any over-the-counter market; (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; (iv) in the judgment of the Representative there shall have occurred any event or condition of a type described in Section 3(h) hereof or (v) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis, either within or outside the United States, that, in the judgment of the Representative, is material and adverse and makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated by this Agreement, the Time of Sale Prospectus and the Prospectus. Any termination pursuant to this Section 9 shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the expenses of the Representative and the Underwriters pursuant to Section 10 hereof or (b) any Underwriter to the Company. Notwithstanding the forgoing, the provisions of Section 7 hereof shall at all times be effective and shall survive such termination.

10) Payment and Reimbursement of Expenses.

a) Whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, the Company will pay, or cause to be paid all costs and expenses incident to the performance of its obligations hereunder, including without limitation, (i) the costs incident to the authorization, issuance, sale, preparation and delivery of the Shares and any taxes payable in that connection; (ii) the costs incident to the preparation, printing and filing under the Securities Act of the Registration Statement, the Preliminary Prospectus, the Time of Sale Prospectus and the Prospectus (including all exhibits, amendments and supplements thereto) and the distribution thereof; (iii) the fees and expenses of the Company's counsel and independent accountants; (iv) the fees and expenses incurred in connection with the registration or qualification (or obtaining exemptions from the qualification or registration) of the Shares under the state or foreign securities or blue sky laws of such jurisdictions as the Representative may designate and the preparation, printing and distribution of a Blue Sky Memorandum and a "Canadian wrapper", and any supplements thereto, and advising the Underwriters of such qualifications, registrations and exemptions (including the related fees and expenses of counsel for the Underwriters); (v) the cost of preparing stock certificates; (vi) the costs and charges of any transfer agent and any registrar; (vii) all fees and expenses incurred in connection with any filing with, and clearance of the offering by, FINRA (including the related fees and expenses of counsel for the Underwriters, not to exceed \$10,000 (exclusive of any filing fees) without the prior written consent of the Company, when taken together with the amount incurred in connection with clause (iv) above); (viii) the costs and expenses of the Company relating to investor presentations on any "road show", including expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the Representative, employees and officers of the Company and any such consultants, and 50% of the cost of any aircraft chartered in connection with the road show, the remaining 50% of the cost of such aircraft to be paid by the Underwriters; (ix) all expenses and application fees related to the listing of the Shares on the NASDAQ; and (x) all other fees, costs and expenses of the nature referred to in Item 13 of Part II of the Registration Statement. Any such amount payable to the Underwriters may be deducted from the purchase price for the Shares. Except as provided in this Section 10 or in Section 7 or Section 8 hereof, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel.

- b) If this Agreement is terminated by the Representative pursuant to Section 6, Section 9 or Section 11 hereof, or if the sale of the Shares on the Closing Date is not consummated because of any refusal, inability or failure on the part of the Company to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Underwriters upon demand for all reasonable out-of-pocket expenses reasonably incurred by them in connection with the proposed purchase and sale of the Shares (including the reasonable and documented fees and expenses of their counsel).
  - c) Except as provided in this Section 10 or Section 7 hereof, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel and expenses incurred by representatives of the Underwriters in connection with any “road show” presentation to potential investors.
- 11) Default of One or More of the Several Underwriters. If, on the Closing Date or any Additional Closing Date any one or more of the several Underwriters shall fail or refuse to purchase Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Shares to be purchased on such date, the Representative may make arrangements satisfactory to the Company for the purchase of such Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Underwritten Shares set forth opposite their respective names on Schedule 1 bears to the aggregate number of Underwritten Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representative with the consent of the non-defaulting Underwriters, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the Closing Date or any Additional Closing Date any one or more of the Underwriters shall fail or refuse to purchase Shares and the aggregate number of Shares with respect to which such default occurs exceeds 10% of the aggregate number of Shares to be purchased on such date, and arrangements satisfactory to the Representative and the Company for the purchase of such Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any party to any other party except that the provisions of Section 7 and Section 10 hereof shall at all times be effective and shall survive such termination. In any such case either the Representative or the Company shall have the right to postpone the Closing Date or the applicable Additional Closing Date, as the case may be, but in no event for longer than seven (7) days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected. As used in this Agreement, the term “Underwriter” shall be deemed to include any person substituted for a defaulting Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.
- 12) Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and any controlling persons referred to in Section 7 hereof. Nothing in this Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein. No purchaser of Shares from any Underwriter shall be deemed to be a successor merely by reason of such purchase.
- 13) Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company and the Underwriters contained in this Agreement or made by or on behalf of the Company or the Underwriters pursuant to this Agreement or any certificate delivered pursuant hereto shall survive the delivery of and payment for the Shares and shall remain in full force and effect, regardless of any termination of this Agreement or any investigation made by or on behalf of the Company or the Underwriters.

- 14) Certain Defined Terms. For purposes of this Agreement, (a) except where otherwise expressly provided, the term “affiliate” has the meaning set forth in Rule 405 under the Securities Act; (b) the term “business day” means any day other than a day on which banks are permitted or required to be closed in New York City; and (c) the term “subsidiary” has the meaning set forth in Rule 405 under the Securities Act.
- 15) Miscellaneous.
- a) *Notices.* All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted and confirmed by any standard form of telecommunication. Notices to the Underwriters shall be given to the Representative at Cantor Fitzgerald & Co., 499 Park Avenue, New York, NY 10022, fax: (212) 829-4708, Attention: General Counsel, and fax: (212) 307-3730, Attention: Capital Markets; with a copy to Covington & Burling LLP, 620 Eighth Avenue, New York, NY 10018, fax: (646) 441-9101, Attention: Donald J. Murray. Notices to the Company shall be given to it at Corbus Pharmaceuticals Holdings, Inc., 100 River Ridge Drive, Suite 103, Norwood MA 02062, email: smoran@corbuspharma.com, Attention: Sean Moran; with a copy to Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, NY 10020, fax: (973) 507-2476, Attention: Steven M. Skolnick.
  - b) *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of New York, including without limitation Section 5-1401 of the New York General Obligations Law. The Company irrevocably (a) submits to the non-exclusive jurisdiction of the federal and state courts in the Borough of Manhattan in The City of New York for the purpose of any suit, action or other proceeding arising out of this Agreement or the transactions contemplated by this Agreement, the Registration Statements and any Preliminary Prospectus or the Prospectus; (b) agrees that all claims in respect of any such suit, action or proceeding may be heard and determined by any such court; (c) waives to the fullest extent permitted by applicable law, any immunity from the jurisdiction of any such court or from any legal process; (d) agrees not to commence any such suit, action or proceeding other than in such courts; and (e) waives, to the fullest extent permitted by applicable law, any claim that any such suit, action or proceeding is brought in an inconvenient forum.
  - c) *Partial Unenforceability.* The invalidity or unenforceability of any section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph or provision hereof. If any section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.
  - d) *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.
  - e) *Amendments or Waivers.* No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.
  - f) *Construction.* The section and exhibit headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement. References herein to any law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority shall be deemed to refer to such law, statute, ordinance, code, regulation, rule or other requirement of such Governmental Authority as amended, reenacted, supplemented or superseded in whole or in part and in effect from time to time and also to all rules and regulations promulgated thereunder.
  - g) *General.* This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including, without limitation, the indemnification and contribution provisions of Section 7 hereof, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Section 7 hereof fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs and its business in order to assure that adequate disclosure has been made in the Registration Statement, any Preliminary Prospectus, the Time of Sale Prospectus, each free writing prospectus and the Prospectus (and any amendments and supplements to the foregoing), as contemplated by the Securities Act and the Exchange Act.

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: /s/ Yuval Cohen

Name: Yuval Cohen, PhD

Title: Chief Executive Officer

Accepted: As of the date first written above

CANTOR FITZGERALD & CO.

By: /s/ Sage Kelly

Name: Sage Kelly

Title: Head of Investment Banking

a. **Pricing Information Provided Orally by the Underwriters**

Public offering price: \$7.00

Number of Underwritten Shares: 4,650,000 shares

Option Shares: 697,500 shares

Underwriting Discount and Commission

- \$0.42 per share for the Underwritten Shares
  - \$0.42 per share for the Option Shares
-

<b>Underwriters</b>	<b>Number of Underwritten Shares to be Purchased</b>
Cantor Fitzgerald & Co.	2,325,000
JMP Securities LLC	1,162,500
Raymond James & Associates, Inc.	1,162,500
Total	4,650,000

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Exhibit A

**Form of Lock-up Agreement**

October \_\_\_\_\_, 2017

Cantor Fitzgerald & Co.

As Representative of the Several Underwriters

c/o Cantor Fitzgerald & Co.  
499 Park Avenue  
New York, New York 10022

RE: Corbus Pharmaceuticals Holdings, Inc. (the “**Company**”)

Ladies & Gentlemen:

The undersigned is an officer or director of the Company or a record or beneficial owner of shares of common stock, par value \$0.0001 per share, of the Company (“**Shares**”) or of securities convertible into or exchangeable or exercisable for Shares. The Company proposes to conduct a public offering of Shares (the “**Offering**”) for which Cantor Fitzgerald & Co. (“**Cantor**”) will act as the representative of the underwriters. The undersigned recognizes that the Offering will benefit each of the Company and the undersigned. The undersigned acknowledges that the underwriters are relying on the representations and agreements of the undersigned contained in this letter agreement in conducting the Offering and, at a subsequent date, in entering into an underwriting agreement (the “**Underwriting Agreement**”) and other underwriting arrangements with the Company with respect to the Offering.

Annex A sets forth definitions for capitalized terms used in this letter agreement that are not defined in the body of this agreement. Those definitions are a part of this agreement.

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agrees that, during the Lock-up Period, the undersigned will not (and will cause any Family Member not to), without the prior written consent of Cantor, which may withhold its consent in its sole discretion:

- Sell or Offer to Sell any Shares or Related Securities currently or hereafter owned either of record or beneficially (as defined in Rule 13d-3 under the Exchange Act) by the undersigned or such Family Member,
- enter into any Swap,
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any Shares or Related Securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or
- publicly announce any intention to do any of the foregoing.

The foregoing will not apply to the registration of the offer and sale of the Shares, and the sale of the Shares to the underwriters, in each case as contemplated by the Underwriting Agreement. In addition, the foregoing will not apply to (i) sales or transfers of Shares solely in connection with the “cashless” exercise of Company stock options outstanding on the date hereof for the purpose of exercising such stock options (provided that any remaining Shares received upon such exercise will be subject to the terms hereof), (ii) the disposition of Shares to the Company in a transaction exempt from Section 16(b) of the Exchange Act solely in connection with the payment of taxes due, (iii) distributions of Shares or Related Securities to general or limited partners, members, shareholders, affiliates or wholly owned subsidiaries of the undersigned or any investment fund or other entity controlled or managed by the undersigned, (iv) transfers or dispositions of Shares or Related Securities to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which are held by the undersigned or a Family Member of the undersigned in a transaction not involving a disposition for value, (v) transfers to the Company of Shares or any Related Security in connection with (A) termination of employment or other termination of a service provider and pursuant to agreements wherein the Company has the option to repurchase such Shares or Related Securities, or (B) agreements wherein the Company has a right of first refusal with respect to transfers of such Shares, (vi) the establishment of any contract, instruction or plan (a “**Plan**”) that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act provided that no sales of the undersigned’s Shares or Related Securities shall be made pursuant to such a Plan prior to the expiration of the Lock-up Period, (vii) the transfer of Shares or Related Securities by gift or intestate succession to a Family Member or to a trust whose beneficiaries consist exclusively of one or more of the undersigned and/or a Family Member and (viii) Shares or Related Securities to be transferred as a gift or gifts or charitable contributions; and *provided, however*, that (A) in any such case, it shall be a condition to a transfer pursuant to subparagraphs (iii), (iv), (vii) and (viii) that each transferee executes and delivers to Cantor an agreement in form and substance satisfactory to Cantor stating that such transferee is receiving and holding such Shares and/or Related Securities subject to the provisions of this letter agreement and agrees not to Sell or Offer to Sell such Shares and/or Related Securities, engage in any Swap or engage in any other activities restricted under this letter agreement except in accordance with this letter agreement (as if such transferee had been an original signatory hereto), and (B) it shall be a condition to a transfer pursuant to subparagraphs (iii), (iv), (vi), (vii) and (viii) that prior to the expiration of the Lock-up Period, no public disclosure or filing under the Exchange Act by any party to the transfer (donor, donee, transferor or transferee) shall be required, or made voluntarily, reporting a reduction in beneficial ownership of Shares or Related Securities in connection with such transfer.

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The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of Shares and/or Related Securities held by the undersigned and the undersigned's Family Members, if any, except in compliance with the foregoing restrictions.

With respect to the Offering only, the undersigned waives any registration rights relating to registration under the Securities Act of the offer and sale of any Shares and/or any Related Securities owned either of record or beneficially by the undersigned, including any rights to receive notice of the Offering.

The undersigned confirms that the undersigned has not, and has no knowledge that any Family Member has, directly or indirectly, taken any action designed to or that might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale of the Shares. The undersigned will not, and will cause any Family Member not to take, directly or indirectly, any such action.

Whether or not the Offering occurs as currently contemplated or at all depends on market conditions and other factors. The Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company and the underwriters.

The undersigned hereby represents and warrants that the undersigned has full power, capacity and authority to enter into this letter agreement. This letter agreement is irrevocable and will be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

*[The Remainder of This Page Intentionally Left Blank; Signature Page Follows ]*

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Signature

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Printed Name of Person Signing

*(Indicate capacity of person signing if  
signing as custodian or trustee, or on behalf  
of an entity)*

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**Certain Defined Terms  
Used in Lock-up Agreement**

For purposes of the letter agreement to which this Annex A is attached and of which it is made a part:

- “**Call Equivalent Position**” shall have the meaning set forth in Rule 16a-1(b) under the Exchange Act.
- “**Exchange Act**” shall mean the Securities Exchange Act of 1934, as amended.
- “**Family Member**” shall mean the spouse of the undersigned, an immediate family member of the undersigned or an immediate family member of the undersigned’s spouse, in each case living in the undersigned’s household or whose principal residence is the undersigned’s household (regardless of whether such spouse or family member may at the time be living elsewhere due to educational activities, health care treatment, military service, temporary internship or employment or otherwise). “**Immediate family**” as used above shall have the meaning set forth in Rule 16a-1(e) under the Exchange Act.
- “**Lock-up Period**” shall mean the period beginning on the date hereof and continuing through the close of trading on the date that is 90 days after the date of the Prospectus (as defined in the Underwriting Agreement).
- “**Put Equivalent Position**” shall have the meaning set forth in Rule 16a-1(h) under the Exchange Act.
- “**Related Securities**” shall mean any options or warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into Shares.
- “**Securities Act**” shall mean the Securities Act of 1933, as amended.
- “**Sell or Offer to Sell**” shall mean to:
  - sell, offer to sell, contract to sell or lend,
  - effect any short sale or establish or increase a Put Equivalent Position or liquidate or decrease any Call Equivalent Position,
  - pledge, hypothecate or grant any security interest in, or
  - in any other way transfer or dispose of,in each case whether effected directly or indirectly.
- “**Swap**” shall mean any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise.

Capitalized terms not defined in this Annex A shall have the meanings given to them in the body of this lock-up agreement.

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**Exhibit B**

Officers and Directors Signing Lock-up Agreement

Officers:

Yuval Cohen, PhD  
Mark A. Tepper, PhD  
Barbara White, MD  
Sean Moran

Directors:

Alan F. Holmer  
David Hochman  
Renu Gupta, MD  
Avery W. Catlin  
Paris Panayiotopoulos

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October 24, 2017

Corbus Pharmaceuticals Holdings, Inc.  
100 River Ridge Drive  
Norwood, Massachusetts 02062

Ladies and Gentlemen:

We have acted as counsel to Corbus Pharmaceuticals Holdings, Inc., a Delaware corporation (the “**Company**”), in connection with (i) the preparation and filing of the Registration Statement on Form S-3 (Registration No. 333-207936) filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), (as so filed and as amended, the “**Registration Statement**”) and the related prospectus contained in the Registration Statement (the “**Base Prospectus**”) and (ii) the preparation and filing of the prospectus supplement, dated October 24, 2017 (the “**Prospectus Supplement**”) relating to the issuance and sale by the Company of up to 5,347,500 shares of common stock, par value \$0.0001 per share (the “**Common Stock**”) of the Company (the “**Shares**”) (including 697,500 shares of Common Stock issuable by the Company upon exercise of an over-allotment option granted by the Company to the underwriters).

The Shares are to be issued and sold by the Company pursuant to the Underwriting Agreement, dated as of October 24, 2017 (the “**Underwriting Agreement**”), among the Company and Cantor Fitzgerald & Co., as representative of the several underwriters named therein, the form of which is being filed with the Commission as Exhibit 1.1 to the Company’s Current Report on Form 8-K, filed on the date hereof.

In connection with this opinion, we have (i) investigated such questions of law, (ii) examined originals or certified, conformed or reproduction copies of such agreements, instruments, documents and records of the Company, such certificates of public officials and such other documents and (iii) received such information from officers and representatives of the Company as we have deemed necessary or appropriate for the purposes of this opinion.

In all such examinations, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of original and certified documents and the conformity to original or certified documents of all copies submitted to us as conformed or reproduction copies. As to various questions of fact relevant to the opinion expressed herein, we have relied upon, and assume the accuracy of, the representations and warranties set forth in the Underwriting Agreement, and certificates and oral or written statements and other information of or from public officials and officers and representatives of the Company.

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Based upon the foregoing and subject to the limitations, qualifications and assumptions set forth herein, we are of the opinion that the Shares have been duly authorized for issuance, and when issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, the Shares will be validly issued, fully paid and non-assessable.

The opinion expressed herein is limited to the applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”), as currently in effect, and reported judicial decisions interpreting such provisions of the DGCL.

The opinion expressed herein is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated herein. We undertake no obligation to supplement this letter if any applicable laws change after the date hereof or if we become aware of any facts that might change the opinion expressed herein after that date or for any other reason.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Current Report on Form 8-K filed by the Company on the date hereof and which is incorporated by reference into the Registration Statement and to the references to this firm under the caption “Legal Matters” in the Prospectus Supplement. In giving these consents, we do not admit that we are “experts” within the meaning of Section 11 of the Securities Act or within the category of persons whose consent is required by Section 7 of the Securities Act.

Very truly yours,

*/s/ Lowenstein Sandler LLP*

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Lowenstein Sandler LLP





Exhibit 99.1

### **Corbus Pharmaceuticals Holdings, Inc. Announces Proposed Public Offering of Common Stock**

**Norwood, MA (October 23, 2017)** – Corbus Pharmaceuticals Holdings, Inc. (NASDAQ: CRBP) (“Corbus” or the “Company”), a clinical stage drug development company targeting rare, chronic, serious inflammatory and fibrotic diseases, today announced that it plans to offer shares of its common stock in an underwritten public offering. Corbus intends to use the proceeds of the proposed offering to fund its continued development of anabasum and for general corporate purposes, which may include funding preclinical studies and clinical trials, manufacturing anabasum for clinical trials and commercial launch, and acquisitions or investments in businesses, products or technologies that are complementary, and to increase its working capital and fund capital expenditures.

Cantor Fitzgerald & Co. is acting as the sole book-running manager for the offering.

The securities described above are being offered by Corbus pursuant to a registration statement (File No. 333-207936) previously filed with and subsequently declared effective by the Securities and Exchange Commission (“SEC”). A preliminary prospectus supplement and accompanying prospectus relating to the offering will be filed with the SEC and will be available on the SEC’s website at [www.sec.gov](http://www.sec.gov) upon filing. Copies of the preliminary prospectus supplement and accompanying prospectus relating to this offering, when available, may be obtained from Cantor Fitzgerald & Co., Attn: Capital Markets, 499 Park Ave., 6th Floor, New York, New York 10022, or by telephone at 212-829-7122, or by e-mail at [prospectus@cantor.com](mailto:prospectus@cantor.com).

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any of the securities described herein, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

#### **About Corbus**

Corbus Pharmaceuticals Holdings, Inc. is a Phase 3 clinical stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat rare, chronic, and serious inflammatory and fibrotic diseases. The Company’s lead product candidate, anabasum, is a novel synthetic oral endocannabinoid-mimetic drug designed to resolve chronic inflammation and fibrotic processes. Anabasum has generated positive data in Phase 2 studies in diffuse cutaneous systemic sclerosis, cystic fibrosis and dermatomyositis. Additionally, the Company is evaluating anabasum in open-label extension studies in systemic sclerosis and skin-predominant dermatomyositis. The Company expects to commence a Phase 2 study in systemic lupus erythematosus, a Phase 3 study in systemic sclerosis and a Phase 2b study in cystic fibrosis in the fourth quarter of 2017.

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## **Forward-Looking Statements**

Statements in this press release that are not statements of historical fact are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, without limitation, statements about Corbus' expectations regarding the completion, timing and size of its public offering and the anticipated use of proceeds therefrom. Words such as "believe," "anticipate," "plan," "expect," "intend," "may," "goal," "potential" and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the offering, as well as risks and uncertainties associated with Corbus' business and finances in general, including the risks and uncertainties in the section captioned "Risk Factors" in the preliminary prospectus supplement related to the public offering that will be filed with the SEC and the Company's most recently filed Annual Report on Form 10-K and subsequently filed Quarterly Reports on Form 10-Q. There can be no assurances that we will be able to complete the proposed offering on the anticipated terms, or at all. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. All forward-looking statements are qualified in their entirety by this cautionary statement, and Corbus undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date of this press release.

## **Investor Contacts**

Jenene Thomas  
Jenene Thomas Communications, LLC  
Phone: (908) 938-1475  
Email: [jenene@jenenethomascommunications.com](mailto:jenene@jenenethomascommunications.com)

## **Media Contact**

Nic DiBella  
JPA Health Communications  
Phone: (617) 657-1307  
Email: [Nic@jpa.com](mailto:Nic@jpa.com)

Source: Corbus Pharmaceuticals Holdings, Inc.

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Exhibit 99.2

### Corbus Pharmaceuticals Holdings, Inc. Prices Underwritten Public Offering of Common Stock

**Norwood, MA (October 24, 2017)** – Corbus Pharmaceuticals Holdings, Inc. (NASDAQ: CRBP) ("Corbus" or the "Company"), a clinical stage drug development company targeting rare, chronic, serious inflammatory and fibrotic diseases, today announced the pricing of a \$32.5 million underwritten public offering of 4,650,000 shares of its common stock at a public offering price of \$7.00 per share. Corbus has also granted the underwriters a 30-day option to purchase up to an additional 697,500 shares of common stock on the same terms as the underwriters are purchasing the base number of shares. After the underwriting discounts and commissions and other estimated offering expenses payable by it, Corbus expects to receive net proceeds from the offering of approximately \$30.4 million, assuming no exercise of the option to purchase additional shares. Corbus currently expects to use the net proceeds from the offering to fund its continued development of anabasum and for general corporate purposes, which may include funding preclinical studies and clinical trials, manufacturing anabasum for clinical trials and commercial launch, and acquisitions or investments in businesses, products or technologies that are complementary, and to increase its working capital and fund capital expenditures. The offering is expected to close on or about October 26, 2017, subject to customary closing conditions.

Cantor Fitzgerald & Co. is acting as the sole book-running manager for the offering. JMP Securities LLC and Raymond James & Associates, Inc. are acting as co-managers for the offering.

The securities described above are being offered by Corbus pursuant to a registration statement (File No. 333-207936) previously filed with and declared effective by the Securities and Exchange Commission (the "SEC"). A preliminary prospectus supplement and accompanying prospectus relating to the offering have been filed with the SEC and are available for free on the SEC's website at [www.sec.gov](http://www.sec.gov) upon filing. Copies of the final prospectus supplement and accompanying prospectus relating to the offering, when available, may be obtained from: Cantor Fitzgerald & Co., Attn: Capital Markets, 499 Park Ave., 6th Floor, New York, New York 10022, or by telephone at 212-829-7122, or by e-mail at [prospectus@cantor.com](mailto:prospectus@cantor.com).

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any of the securities described herein, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

#### About Corbus

Corbus Pharmaceuticals Holdings, Inc. is a Phase 3 clinical stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat rare, chronic, and serious inflammatory and fibrotic diseases. The Company's lead product candidate, anabasum, is a novel synthetic oral endocannabinoid-mimetic drug designed to resolve chronic inflammation and fibrotic processes. Anabasum has generated positive data in Phase 2 studies in diffuse cutaneous systemic sclerosis, cystic fibrosis and dermatomyositis. Additionally, the Company is evaluating anabasum in open-label extension studies in systemic sclerosis and skin-predominant dermatomyositis. The Company expects to commence a Phase 2 study in systemic lupus erythematosus, a Phase 3 study in systemic sclerosis and a Phase 2b study in cystic fibrosis in the fourth quarter of 2017.

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## **Forward-Looking Statements**

Statements in this press release that are not statements of historical fact are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, without limitation, statements about Corbus' expectations regarding the completion, timing and size of its public offering and the anticipated use of proceeds therefrom. Words such as "believe," "anticipate," "plan," "expect," "intend," "may," "goal," "potential" and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the offering, as well as risks and uncertainties associated with Corbus' business and finances in general, including the risks and uncertainties in the section captioned "Risk Factors" in the preliminary prospectus supplement related to the public offering filed with the SEC and the Company's most recently filed Annual Report on Form 10-K and subsequently filed Quarterly Reports on Form 10-Q. There can be no assurance that Corbus will be able to complete the offering on the anticipated terms or at all. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. All forward-looking statements are qualified in their entirety by this cautionary statement, and Corbus undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date of this press release.

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