

# ALDER BIOPHARMACEUTICALS INC

## **FORM 8-K** (Current report filing)

Filed 07/14/17 for the Period Ending 07/12/17

|             |  |
|-------------|--|
| Address     | 11804 NORTH CREEK PARKWAY SOUTH<br>BOTHELL, WA 98011 |
| Telephone   | 425-205-2900   |
| CIK         | 0001423824   |
| Symbol      | ALDR   |
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| Industry    | Biotechnology & Medical Research                     |
| Sector      | Healthcare   |
| Fiscal Year | 12/31  |

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

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**FORM 8-K**

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

**Date of Report (Date of earliest event reported): July 12, 2017**

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**Alder BioPharmaceuticals, Inc.**  
(Exact name of registrant as specified in its charter)

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

**001-36431**  
(Commission  
File Number)

**90-0134860**  
(IRS Employer  
Identification No.)

**11804 North Creek Parkway South**  
**Bothell, WA**  
(Address of principal executive offices)

**98011**  
(Zip Code)

**(425) 205-2900**  
Registrant's telephone number, including area code:

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

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

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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In this report, “Alder BioPharmaceuticals,” “we,” “us” and “our” refer to Alder BioPharmaceuticals, Inc.

**Item 8.01 Other Events.**

*Underwriting Agreement*

On July 12, 2017, we entered into an underwriting agreement (the “*Underwriting Agreement*”) with Leerink Partners LLC and Wells Fargo Securities, LLC, as representatives of the several underwriters named therein (collectively, the “*Underwriters*”), relating to the issuance and sale (the “*Offering*”) of 15,000,000 shares of our common stock, par value \$0.0001 per share. The price to the public in the Offering is \$10.00 per share, and the Underwriters have agreed to purchase the shares from us pursuant to the Underwriting Agreement at a price of \$9.40 per share. The Underwriters have a 30-day option to purchase up to an additional 2,250,000 shares of common stock, which they exercised in full on July 13, 2017. Including this option exercise, the net proceeds to Alder BioPharmaceuticals from this Offering are expected to be approximately \$161.5 million, after deducting underwriting discounts and commissions and other estimated offering expenses payable by us. All of the shares in the offering are being sold by us.

The Offering is being made pursuant to our effective registration statement on Form S-3 (Registration Statement No. 333-216199), as previously filed with the Securities and Exchange Commission, and a related prospectus.

The Underwriting Agreement contains customary representations, warranties and agreements by us, customary conditions to closing, indemnification obligations of Alder BioPharmaceuticals 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 Underwriting Agreement is filed as Exhibit 1.1 to this report, and the description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit. A copy of the opinion of Cooley LLP relating to the legality of the issuance and sale of the shares in the Offering is attached as Exhibit 5.1 hereto.

**Item 9.01 Financial Statements and Exhibits.**

*(d) Exhibits.*

| <u>Exhibit No.</u> | <u>Description</u>                               |
|--------------------|--|
| 1.1                | Underwriting Agreement, dated July 12, 2017      |
| 5.1                | Opinion of Cooley LLP                            |
| 23.1               | Consent of Cooley LLP (contained in Exhibit 5.1) |

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**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.

**Alder BioPharmaceuticals, Inc.**

Dated: July 14, 2017

By: /s/ Randall C. Schatzman  
Randall C. Schatzman, Ph.D.  
President and Chief Executive Officer

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**EXHIBIT INDEX**

| <b><u>Exhibit<br/>No.</u></b> | <b><u>Description</u></b>   |
|-------------------------------|---|
| 1.1                           | <a href="#"><u>Underwriting Agreement, dated July 12, 2017</u></a>      |
| 5.1                           | <a href="#"><u>Opinion of Cooley LLP</u></a>                            |
| 23.1                          | <a href="#"><u>Consent of Cooley LLP (contained in Exhibit 5.1)</u></a> |

## ALDER BIOPHARMACEUTICALS, INC.

15,000,000 Shares of Common Stock

## Underwriting Agreement

July 12, 2017

Leerink Partners LLC  
Wells Fargo Securities, LLC,  
As Representatives of the  
several Underwriters listed  
in Schedule 1 hereto

c/o Leerink Partners LLC  
201 Spear Street, Suite 1620,  
San Francisco, California 94105-1699

c/o Wells Fargo Securities, LLC  
375 Park Avenue, 4th Floor  
New York, New York 10152

Ladies and Gentlemen:

Alder BioPharmaceuticals, Inc., a Delaware corporation (the “Company”), proposes to issue and sell to the several underwriters listed in Schedule 1 hereto (the “Underwriters”), for whom Leerink Partners LLC and Wells Fargo Securities, LLC are acting as representatives (the “Representatives”), an aggregate of 15,000,000 shares of common stock, par value \$0.0001 per share, of the Company (the “Underwritten Shares”) and, at the option of the Underwriters, up to an additional 2,250,000 shares of common stock of the Company (the “Option Shares”). The Underwritten Shares and the Option Shares are herein referred to as the “Shares.” The shares of common stock of the Company 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 registration statement on Form S-3 (File No. 333-216199), including a related prospectus or prospectuses, relating to securities of the Company, including the Shares, to be issued from time to time by the Company. Such registration statement, at the time it became effective, including the information, if any, deemed pursuant to Rule 430A, 430B or 430C under the Securities Act to be part of the registration statement at the time of its effectiveness (“Rule 430 Information”), is referred to herein as the “Registration Statement”; and as used herein, the term “Preliminary Prospectus” means the prospectus included in the Registration Statement at the time of its effectiveness that omits Rule 430 Information (the “Base Prospectus”) and the prospectus supplement dated July 11, 2017 thereto relating to the Shares, and the term “Prospectus” means the Base Prospectus and the prospectus supplement in the form first used (or made available upon request of purchasers pursuant to Rule 173 under the Securities Act) in connection with confirmation of sales of the Shares. Any reference in this underwriting agreement (this “Agreement”) to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents

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 date of such Preliminary Prospectus or the Prospectus, as the case may be, and any reference to “amend”, “amendment” or “supplement” with respect to the Registration Statement, any Preliminary 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 and the Prospectus.

At or prior to the Applicable Time (as defined below), the Company had prepared the following information (collectively with the pricing information set forth on Annex A, the “Pricing Disclosure Package”): the Preliminary Prospectus dated July 11, 2017.

“Applicable Time” means 5:45 P.M., New York City time, on July 12, 2017.

## 2. Purchase of the Shares.

(a) The Company agrees to issue and sell the Underwritten Shares to the several Underwriters as provided in this Agreement, and each Underwriter, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees, severally and not jointly, to purchase from the Company the respective number of Underwritten Shares set forth opposite such Underwriter’s name in Schedule 1 hereto at a price per share (the “Purchase Price”) of \$9.40.

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 10 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 Representatives in their 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 day following the date of the Prospectus, by written notice from the Representatives 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 tenth 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 10 hereof or unless otherwise agreed to in writing by the Representatives and the Company). Any such notice shall be given at least two business days prior to the date and time of delivery specified therein.

(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 Representatives is advisable, and initially to offer the Shares on the terms set forth in the Pricing Disclosure Package. 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 Representatives in the case of the Underwritten Shares, at the offices of Wilson Sonsini Goodrich & Rosati, Professional Corporation at 701 Fifth Avenue, Suite 5100, Seattle, Washington 98104 at 10:00 A.M., New York City time, on July 18, 2017, or at such other time or place on the same or such other date, not later than the fifth business day thereafter, as the Representatives 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 Representatives in the written notice of the Underwriters' 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 Representatives 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 Representatives 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, none of the Representatives 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) *Preliminary Prospectus.* No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission, and each Preliminary Prospectus included in the Pricing Disclosure Package, at the time of filing thereof, complied in all material respects with 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; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in any Preliminary Prospectus, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(b) *Pricing Disclosure Package*. The Pricing Disclosure Package as of the Applicable Time did not, and as of the Closing Date and as of the Additional Closing Date, as the case may be, 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; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in such Pricing Disclosure Package, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof. No statement of material fact included in the Prospectus has been omitted from the Pricing Disclosure Package and no statement of material fact included in the Pricing Disclosure Package that is required to be included in the Prospectus has been omitted therefrom.

(c) *Issuer 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, made, used, authorized, approved or referred to and will not prepare, make, 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 (each such communication by the Company or its agents and representatives (other than a communication referred to in clause (i) below) an “Issuer Free Writing Prospectus”) other than any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act, each electronic road show and any other written communications approved in writing in advance by the Representatives. Each such Issuer Free Writing Prospectus complies in all material respects with the Securities Act, has been or will be (within the time period specified in Rule 433) filed in accordance with the Securities Act (to the extent required thereby) and does not conflict with the information contained in the Registration Statement or the Pricing Disclosure Package, and, when taken together with the Preliminary Prospectus accompanying, or delivered prior to delivery of, such Issuer Free Writing Prospectus, did not, and as of the Closing Date and as of the Additional Closing Date, as the case may be, 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; provided that the Company makes no representation or warranty with respect to any statements or omissions made in each such Issuer Free Writing Prospectus or Preliminary Prospectus in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in such Issuer Free Writing Prospectus or Preliminary Prospectus, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(d) *Registration Statement and Prospectus*. The Registration Statement is an “automatic shelf registration statement” as defined under Rule 405 of the Securities Act that has been filed with the Commission not earlier than three years prior to the date hereof; and no notice of objection of the Commission to the use of such registration statement or any post-effective amendment thereto pursuant to Rule 401(g)(2) under the Securities Act has been received by the Company. No order suspending the effectiveness of the Registration Statement has been issued by the Commission, and no proceeding for that purpose or pursuant to Section 8A of the

Securities Act against the Company or related to the offering of the Shares has been initiated or, to the knowledge of the Company, threatened by the Commission; as of the applicable effective date of the Registration Statement and any post-effective amendment thereto, the Registration Statement and any such post-effective amendment 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 in order to make the statements therein not misleading; and as of the date of the Prospectus and any amendment or supplement thereto and as of the Closing Date and as of the Additional Closing Date, as the case may be, the Prospectus 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; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement and the Prospectus and any amendment or supplement thereto, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or any offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Shares and at the date hereof, the Company was not and is not an “ineligible issuer,” and is a “well-known seasoned issuer,” in each case as defined in Rule 405 under the Securities Act.

(e) *Incorporated Documents.* The documents incorporated by reference in the Registration Statement, the Prospectus and the Pricing Disclosure Package, when they were filed with the Commission conformed in all material respects to the requirements of the Securities Act or Exchange Act, as applicable, 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 Prospectus or the Pricing Disclosure Package, 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.

(f) *No Material Adverse Change.* Except as disclosed the Registration Statement, the Pricing Disclosure Package and the Prospectus, since the end of the period covered by the latest audited financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus: (i) there has been no change, nor any development or event involving a prospective change, in the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries, taken as a whole, that is material and adverse; (ii) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock; (iii) there has been no material adverse change in the capital stock, short-term indebtedness, long-term indebtedness, net current assets or net assets of the Company and its subsidiaries, (iv) neither the Company nor any of its subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole; and (v) 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.

(g) *Good Standing of the Company* . The Company has been duly incorporated and is existing and in good standing under the laws of the State of Delaware, with power and authority (corporate and other) to own its properties and conduct its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the Company is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to be so qualified in good standing would not, individually or in the aggregate, result in a material adverse effect on the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole (a “Material Adverse Effect”).

(h) *Subsidiaries* . Each subsidiary of the Company has been duly incorporated, organized or formed and is existing and in good standing under the laws of the jurisdiction of its incorporation, organization or formation with power and authority (corporate and other power) to own its properties and conduct its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and each subsidiary of the Company is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification in each case, except where the failure to be so qualified in good standing would not individually or in the aggregate have a Material Adverse Effect; all of the issued and outstanding capital stock of each subsidiary of the Company has been duly authorized and validly issued and is fully paid and nonassessable; and the capital stock of each subsidiary owned by the Company, directly or through subsidiaries, is owned free from liens, encumbrances and defects. The subsidiaries of the Company set forth on Exhibit 21.1 to the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 are the only subsidiaries, direct or indirect, of the Company and each subsidiary of the Company is a direct wholly-owned subsidiary of the Company.

(i) *Shares* . The Shares and all other outstanding shares of capital stock of the Company have been duly authorized; the authorized equity capitalization of the Company is as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; all outstanding shares of capital stock of the Company are, and, when the Shares have been delivered and paid for in accordance with this Agreement on the Closing Date or the Additional Closing Date, as the case may be, such Shares will have been, validly issued, fully paid and nonassessable, and will conform to the information in the Registration Statement, the Pricing Disclosure Package and the Prospectus and to the description of such Shares contained in the Prospectus; the stockholders of the Company have no preemptive rights with respect to the Shares; and none of the outstanding shares of capital stock of the Company have been issued in violation of any preemptive or similar rights of any security holder. Except as disclosed in or contemplated by the Registration Statement, the Pricing Disclosure Package and the Prospectus, as of the dates indicated therein, there are no outstanding (A) securities or obligations of the Company convertible into or exchangeable for any capital stock of the Company, (B) warrants, rights or options to subscribe for or purchase from the Company any such capital stock or any such convertible or exchangeable securities or obligations or (C) obligations of the Company to issue or sell any shares of capital stock, any such convertible or exchangeable securities or obligations or any such warrants, rights or options. The Company has not, directly or indirectly, offered or sold any of the Shares by means of any “prospectus” (within the meaning of the Securities Act) or used any “prospectus” or made any offer (within the meaning of the Securities Act) in connection with the offer or sale of the Shares, in each case other than the Preliminary Prospectus.

(j) *Other Offerings* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company has not sold, issued or distributed any of its common stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or Regulation S of, the Securities Act, other than common stock issued pursuant to (i) the Company's employee benefit plans, qualified stock option plans or other employee compensation plans, or (ii) pursuant to outstanding options or rights.

(k) *No Finder's Fee* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or other like payment in connection with this offering.

(l) *Registration Rights* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to a Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Securities Act (collectively, "Registration Rights"), and any person to whom the Company has granted Registration Rights has agreed not to exercise such rights until after the expiration of the period referred to in Section 4(h) hereof.

(m) *Listing* . The Shares have been approved for listing on The NASDAQ Stock Market, subject to notice of issuance.

(n) *Absence of Further Requirements* . No consent, approval, authorization, or order of, or filing or registration with, any person (including any governmental agency or body or any court) is required for the consummation of the transactions contemplated by this Agreement in connection with the offering, issuance and sale of the Shares, except (i) such as have been obtained, or made on or prior to the date hereof, (ii) such as may be required under state securities laws or (iii) such as may be required by the Financial Industry Regulatory Authority, Inc. ("FINRA").

(o) *Title to Property* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus or as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, the Company and its subsidiaries have good and marketable title to all personal assets owned by them, in each case free from liens, charges, encumbrances and defects and, the Company and its subsidiaries hold any leased real or personal property under valid and enforceable leases with no terms or provisions that would materially interfere with the use made or to be made thereof by them. Neither the Company nor any subsidiary owns any real property.

(p) *Absence of Defaults and Conflicts Resulting from Transaction* . The execution, delivery and performance of this Agreement by the Company, and the issuance and sale of the Shares will not result in a breach or violation of any of the terms or provisions of, or constitute a

default or a Debt Repayment Triggering Event (as defined below) under, or result in the imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to (i) the charter or by-laws of the Company or any of its subsidiaries, (ii) any statute, rule, regulation or order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their properties, or (iii) any agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the properties of the Company or any of its subsidiaries is subject except with respect to (ii) and (iii) above on such breaches, violations, defaults, liens, charges, or encumbrances that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; a “Debt Repayment Triggering Event” means any event or condition that gives, or with the giving of notice or lapse of time would give, the holder of any note, debenture, or other evidence of indebtedness (or any person acting on such holder’s behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(q) *Absence of Existing Defaults and Conflicts* . Neither the Company nor any of its subsidiaries is in violation of its respective charter or by-laws or in default (or with the giving of notice or lapse of time would be in default) under any existing obligation, agreement, covenant or condition contained in any indenture, loan agreement, mortgage, lease or other agreement or instrument to which any of them is a party or by which any of them is bound or to which any of the properties of any of them is subject, except such defaults that would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on the Company and its subsidiaries taken as a whole.

(r) *Authorization of Agreement* . This Agreement has been duly authorized, executed and delivered by the Company.

(s) *Possession of Licenses and Permits* . The Company and its subsidiaries possess, and are in compliance with the terms of, all adequate certificates, authorizations, franchises, licenses, approvals, consents, permits and other authorizations (“Licenses”) issued by the appropriate federal, state, local or foreign regulatory agencies or bodies necessary or material to the conduct of the business as now conducted and as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, including, without limitation, all such certificates, approvals, authorizations, licenses and permits required by the United States Food and Drug Administration (the “FDA”) or any other federal, state or foreign agencies or bodies engaged in the regulation of pharmaceuticals or biohazardous materials, except where the failure so to possess would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect; the Company is in compliance with the terms and conditions of all such Licenses, except where the failure so to comply would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect; all of the Licenses are valid and in full force and effect, except when the invalidity of such Licenses or the failure of such Licenses to be in full force and effect would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect; and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Effect.

(t) *Regulatory Compliance* . The Company has operated and currently is in compliance with all applicable rules and regulations of the FDA, except where the failure to so operate or be in compliance would not reasonably be expected to have a Material Adverse Effect.

Any human studies or tests and preclinical and clinical trials conducted by or, to the Company's knowledge, on behalf of or otherwise relied upon by the Company that are described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, were and, if still pending, are being, conducted in all material respects in accordance with the protocols submitted to the FDA and all applicable laws and regulations. Any descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus are accurate and complete in all material respects; and the Company has not received any notices or correspondence from the FDA or any foreign, state or local governmental body exercising comparable authority requiring the termination, suspension, or clinical hold of any pending studies, tests or preclinical or clinical trials, or such written notice or correspondence from any Institutional Review Board or comparable authority requiring the termination or suspension of a clinical study, conducted by or on behalf of the Company, which termination, suspension or clinical hold would reasonably be expected to have a Material Adverse Effect. Except to the extent disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company is not aware of any other trials, studies or tests, the results of which reasonably call into question the results described or referred to in the Registration Statement, the Pricing Disclosure Package and the Prospectus when viewed in the context in which such results are described and the clinical stage of development.

(u) *Absence of Labor Dispute* . No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent that could have a Material Adverse Effect.

(v) *Possession of Intellectual Property* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, to the knowledge of the Company, the Company and its subsidiaries own, possess, license or can acquire on reasonable terms sufficient trademarks, trade names, inventions, patents, patent rights, copyrights, domain names, licenses, approvals, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems, or procedures) and other intellectual property and similar rights, including registrations and applications for registration thereof (collectively, "Intellectual Property Rights") necessary or material to the conduct of the business as now conducted and as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, except where the failure to so own, possess, license or otherwise acquire would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus (i) to the Company's knowledge, there are no rights of third parties to any of the Intellectual Property Rights owned by the Company or its subsidiaries; (ii) to the Company's knowledge, there is no material infringement, misappropriation breach, default or other violation, or the occurrence of any event that with notice or the passage of time would constitute any of the foregoing, by third parties of any of the Intellectual Property Rights of the Company or its subsidiaries; (iii) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the Company's or any subsidiary's rights in or to, or the violation of any of the terms of, any of their Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending, or to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity, enforceability or scope of any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (v) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others that the Company or any subsidiary infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property Rights or other proprietary rights of others and the Company is unaware of any other fact which would form a reasonable basis for any such claim;

(vi) there is no court-issued order, judgment, decree or injunction restricting the operation of the Company's business on the basis of a conflict with or infringement of the patent rights of any third party; and (vii) none of the Intellectual Property Rights used by the Company or its subsidiaries in their businesses has been obtained or is being used by the Company or its subsidiaries in violation of any contractual obligation binding on the Company or any of its subsidiaries in violation of the rights of any persons, except in each case covered by clauses (i) – (vii) such as would not, if determined adversely to the Company or any of its subsidiaries, individually or in the aggregate, have a Material Adverse Effect.

(w) *PTO Applications* . The Company has duly and properly filed or caused to be filed with the United States Patent and Trademark Office (the "PTO") and applicable foreign and international patent authorities all material patent applications owned by the Company (the "Company Patent Applications"). The Company has complied with the PTO's duty of candor and disclosure for the Company Patent Applications and has made no material misrepresentation in the Company Patent Applications. The Company has complied with the duty of candor and disclosure for the Company Patent Applications pending in countries outside the United States. To the Company's knowledge, any information material to a determination of patentability regarding the Company Patent Applications has been called to the attention of the PTO or similar foreign authority. To the Company's knowledge, there is no information that has not been called to the attention of the PTO or similar foreign authority that would preclude the grant of a patent for the Company Patent Applications. To the Company's knowledge, there is no information which would preclude the Company from having clear title to the Company Patent Applications. To the Company's knowledge, there is no information suggesting that the Company does not currently hold clear title to the Company Patent Applications. To the Company's knowledge, there is no information suggesting that the Company's ownership interest in the Company Patent Applications has not properly been recorded with the PTO or other comparable office.

(x) *Environmental Laws* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (i)(A) neither the Company nor any of its subsidiaries is in violation of, or has any liability under, any federal, state, local or non-U.S. statute, law, rule, regulation, ordinance, code, other requirement or rule of law (including common law), or decision or order of any domestic or foreign governmental agency, governmental body or court, relating to pollution, to the use, handling, transportation, treatment, storage, discharge, disposal or release of Hazardous Substances, to the protection or restoration of the environment or natural resources (including biota), to health and safety including as such relates to exposure to Hazardous Substances, and to natural resource damages (collectively, "Environmental Laws"), (B) neither the Company nor any of its subsidiaries owns, occupies, operates or uses any real property contaminated with Hazardous Substances, (C) neither the Company nor any of its subsidiaries is conducting or funding any investigation, remediation, remedial action or monitoring of actual or suspected Hazardous Substances in the environment, (D) neither the Company nor any of its subsidiaries is liable or allegedly liable for any release or threatened release of Hazardous Substances, including at any off-site treatment, storage or disposal site, (E) neither the Company nor any of its subsidiaries is subject to any claim by any governmental agency or governmental body or person relating to Environmental Laws or Hazardous Substances, and (F) the Company and its subsidiaries have received and are in compliance with all, and have no liability under any, permits, licenses, authorizations, identification numbers or other approvals required under applicable Environmental Laws to conduct their respective businesses, except in each case covered by clauses (A) – (F) such as would not individually or in the aggregate have a Material Adverse Effect; (ii) to the knowledge of the Company there are no facts or circumstances that would reasonably be expected to result in a violation of, liability under, or claim pursuant to any Environmental Law that would have a

Material Adverse Effect; (iii) to the knowledge of the Company there are no requirements proposed for adoption or implementation under any Environmental Law that would reasonably be expected to have a Material Adverse Effect; and (iv) in the ordinary course of its business, the Company periodically evaluates the effect, including associated costs and liabilities, of Environmental Laws on the business, properties, results of operations and financial condition of it and its subsidiaries, and, on the basis of such evaluation, the Company has reasonably concluded that such Environmental Laws will not, singly or in the aggregate, have a Material Adverse Effect. For purposes of this subsection “Hazardous Substances” means (y) petroleum and petroleum products, by-products or breakdown products, radioactive materials, asbestos-containing materials, polychlorinated biphenyls and mold, and (z) any other chemical, material or substance defined or regulated as toxic or hazardous or as a pollutant, contaminant or waste under Environmental Laws.

(y) *Accurate Disclosure* . The statements in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the headings “Description of Capital Stock” and “Material U.S. federal income tax consequences to non-U.S. holders” insofar as such statements summarize legal matters, agreements, documents or proceedings discussed therein, are accurate and fair summaries of such legal matters, agreements, documents or proceedings and present the information required to be shown.

(z) *Absence of Manipulation* . The Company has not taken, directly or indirectly, any action that is designed to or that has constituted or that would 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 or resale of the Shares; however, the Company makes no representation with respect to any actions taken by the Underwriters.

(aa) *Statistical and Market-Related Data* . Any third-party statistical and market-related data included or incorporated by reference in a Registration Statement, a Preliminary Prospectus the Pricing Disclosure Package and the Prospectus is based on or derived from sources that the Company believes to be reliable and accurate, and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(bb) *Internal Controls and Compliance with the Sarbanes-Oxley Act* . Except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company, its subsidiaries and the Company’s Board of Directors (the “Board”) are in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002, as amended (“Sarbanes Oxley”) and all applicable rules of The NASDAQ Stock Market (the “Exchange Rules”, and together with the Securities Act, the Exchange Act, and Sarbanes Oxley, the “Securities Laws”). The Company maintains a system of internal controls, including, but not limited to, disclosure controls and procedures, internal controls over accounting matters and financial reporting and legal and regulatory compliance controls (collectively, “Internal Controls”) that comply with applicable Securities Laws 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 generally accepted accounting principles, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”) and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and

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(iv) 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 the interactive data in eXtensible Business Reporting Language (the “XBRL”) incorporated by reference in the Registration Statement is accurate. The Internal Controls are overseen by the Audit Committee of the Board (the “Audit Committee”) in accordance with Exchange Rules. The Company has not publicly disclosed or reported to the Audit Committee or the Board, and within the next 90 days the Company does not reasonably expect to publicly disclose or report to the Audit Committee or the Board, a significant deficiency, material weakness, adverse change in Internal Controls or fraud involving management or other employees who have a significant role in Internal Controls, any violation of, or failure to comply with, the Securities Laws, or any matter which, if determined adversely, would have a Material Adverse Effect.

(cc) *Litigation* . Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no pending actions, suits or proceedings (including any inquiries or investigations by any court or governmental agency or body, domestic or foreign) against or affecting the Company, any of its subsidiaries or any of their respective properties that, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate have a Material Adverse Effect, or would materially and adversely affect the ability of the Company to perform its obligations under this Agreement, or which are otherwise material in the context of the sale of the Shares; and no such actions, suits or proceedings (including any inquiries or investigations by any court or governmental agency or body, domestic or foreign), to the Company’s knowledge are threatened or contemplated.

(dd) *Financial Statements* . The financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus comply in all material respects with 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 shown and their results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with U.S. GAAP applied on a consistent basis, except as otherwise noted therein and except in the case of unaudited, interim financial statements, which do not contain certain footnotes as permitted by the rules of the Commission. PricewaterhouseCoopers LLP, which has audited the financial statements of the Company included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, has advised the Company that it is an independent registered public accounting firm with respect to the Company within the Securities Act and the applicable rules and guidance from the Public Company Accounting Oversight Board (United States). The selected consolidated financial data incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus presents fairly in all material respects the information shown therein and such data has been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company. The Company does not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations), not disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus. There are no financial statements that are required to be included in the Registration Statement, the Pricing Disclosure Package and the Prospectus that are not included as required.

(ee) *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 Pricing Disclosure Package and the Prospectus, will not be an “investment company” as defined in the Investment Company Act of 1940, as amended.

(ff) *Ratings* . No “nationally recognized statistical rating organization” as such term is defined in Section 3(a)(62) of the Exchange Act (i) has imposed (or has informed the Company that it is considering imposing) any condition (financial or otherwise) on the Company’s retaining any rating assigned to the Company or any securities of the Company or (ii) has indicated to the Company that it is considering any of the actions described in Section 6(c)(B) hereof.

(gg) *Anti-Corruption* . Neither the Company nor any of its subsidiaries or affiliates, nor any director, officer, or employee, nor, to the Company’s knowledge, any agent or representative of the Company or of any of its subsidiaries or affiliates, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment or giving of money, property, gifts or anything else of value, directly or indirectly, to any “government official” (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) to influence official action or secure an improper advantage; and the Company and its subsidiaries and affiliates have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintain and will continue to maintain policies and procedures designed to promote and achieve compliance with such laws and with the representation and warranty contained herein.

(hh) *Anti-Money Laundering* . The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (“USA Patriot Act”), and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct 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 best knowledge of the Company, threatened.

(ii) *Economic Sanctions* . (i) Neither the Company nor any of its subsidiaries, nor any director, officer, or employee thereof, nor, to the Company’s knowledge, any agent, affiliate or representative of the Company or any of its subsidiaries, is an individual or entity (“Person”) that is, or is owned or controlled by a Person that is: (A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury’s Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty’s Treasury, or other relevant sanctions authority (collectively, “Sanctions”), nor (B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Burma/Myanmar, Crimea Region of Ukraine, Cuba, Iran, Libya, North Korea, Sudan and Syria), (ii) the Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person: (A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or (B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise) and (iii) for the past five years, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(jj) *No Restrictions on Payments by Subsidiaries* . No 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, (i) from paying any dividends to the Company, (ii) from making any other distribution on such subsidiary's capital stock, (iii) from repaying to the Company any loans or advances to such subsidiary from the Company or (iv) from transferring any of such subsidiary's material properties or assets to the Company or any other subsidiary of the Company.

(kk) *Payment of Taxes* . The Company and its subsidiaries have filed all federal, state, local and non-U.S. tax returns that are required to be filed or have requested extensions thereof (except in any case in which the failure so to file would not have a Material Adverse Effect); and, except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company and its subsidiaries have paid all taxes (including any assessments, fines or penalties) required to be paid by them except for any such taxes, assessments, fines or penalties currently being contested in good faith or as would not, individually or in the aggregate, have a Material Adverse Effect.

(ll) *Insurance* . The Company and its subsidiaries are insured by insurers with appropriately rated claims paying abilities against such losses and risks and in such amounts as are prudent and customary for similarly situated companies in the business in which they are engaged; all material policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or their respective businesses, assets, employees, officers and directors are in full force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and there are no material claims by the Company or any of its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; neither the Company nor any such subsidiary has been refused any insurance coverage sought or applied for; neither the Company nor any such subsidiary has 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 from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect, except as set forth in or contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the Company has obtained directors' and officer's insurance in reasonable and customary coverage amounts.

(mm) *Required Filings* . The Company has timely made all filings required to be made by it under the Exchange Act.

(nn) *XBRL* . The interactive data in XBRL incorporated by reference in the Registration Statement is accurate and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

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, will file any Issuer Free Writing Prospectus to the extent required by Rule 433 under the Securities Act; and the Company will file within the prescribed time period all reports and any definitive proxy or information statements required to be filed by the Company

with the Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus is required in connection with the offering or sale of the Shares; and the Company will furnish copies of the Prospectus and each Issuer Free Writing 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 Representatives 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.* Upon the request of the Representatives, the Company will deliver, without charge, (i) to the Representatives, four signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith; 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 and each Issuer Free Writing Prospectus) as the Representatives 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 would be required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Shares by any Underwriter or dealer.

(c) *Amendments or Supplements, Issuer Free Writing Prospectuses.* Before making, preparing, using, authorizing, approving, referring to or filing any Issuer Free Writing Prospectus, and 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 Representatives and counsel for the Underwriters a copy of the proposed Issuer Free Writing Prospectus, amendment or supplement for review and will not make, prepare, use, authorize, approve, refer to or file any such Issuer Free Writing Prospectus or file any such proposed amendment or supplement to which the Representatives reasonably object.

(d) *Notice to the Representatives.* The Company will advise the Representatives promptly, and confirm such advice in writing, (i) when any amendment to the Registration Statement has been filed or becomes effective; (ii) when any supplement to the Prospectus, any Issuer Free Writing Prospectus or any amendment to the Prospectus has been filed or distributed; (iii) 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; (iv) of the issuance by the Commission or any other governmental or regulatory authority of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of any Preliminary Prospectus, the Pricing Disclosure Package or the Prospectus or the initiation or threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (v) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, any of the Pricing Disclosure Package or any Issuer Free Writing 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, the Pricing Disclosure Package or any such Issuer Free Writing Prospectus is delivered to a purchaser, not misleading; (vi) 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 (vii) 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 threatening of any proceeding for such purpose; and the Company will use its reasonable best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of any Preliminary Prospectus, any of the Pricing Disclosure Package 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 immediately 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 Representatives 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 Pricing Disclosure Package 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 Pricing Disclosure Package is delivered to a purchaser, not misleading or (B) it is necessary to amend or supplement the Pricing Disclosure Package 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 Representatives may designate such amendments or supplements to the Pricing Disclosure Package (or any document to be filed with the Commission and incorporated by reference therein) as may be necessary so that the statements in the Pricing Disclosure Package as so amended or supplemented will not, in the light of the circumstances existing when the Pricing Disclosure Package is delivered to a purchaser, be misleading or so that the Pricing Disclosure Package will comply with law.

(f) *Blue Sky Compliance.* The Company will qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Representatives 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 Representatives 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 months beginning with the first fiscal quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement.

(h) *Clear Market.* For a period of 60 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 (“Lock-Up Securities”), or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, 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 Leerink Partners LLC and Wells Fargo Securities, LLC, other than (A) the Shares to be sold hereunder, (B) any Stock issued upon the exercise of options or the conversion of a security outstanding on the date hereof and described in the Pricing Disclosure Package and the Prospectus, (C) the grant of options or the issuance of Lock-Up Securities by the Company to employees, officers, directors, advisors or consultants of the Company pursuant to employee benefit plans in effect on the date hereof and described in the Pricing Disclosure Package and the Prospectus, (D) the filing by the Company of a registration statement with the Commission on Form S-8 or an amendment to any such registration statement on file with the Commission in respect of any Lock-Up Securities issued under or the grant of any award pursuant to an employee benefit plan in effect on the date hereof and described in the Pricing Disclosure Package and the Prospectus or (E) the sale or issuance of or entry into an agreement to sell or issue Lock-Up Securities in connection with any (1) mergers, (2) acquisition of securities, businesses, properties or other assets, (3) joint ventures, or (4) strategic alliances; provided, that the aggregate number of Lock-Up Securities or securities convertible into or exercisable for Stock (on an as-converted or as-exercised basis, as the case may be) that the Company may sell or issue or agree to sell or issue pursuant to this clause (E) shall not exceed 5% of the total number of shares of Stock issued and outstanding immediately following the completion of the transactions contemplated by this Agreement; and provided further, that each recipient of Lock-Up Securities or securities convertible into or exercisable for Stock pursuant to this clause (E) shall execute and deliver a lock-up agreement in the form of Exhibit A hereto on or prior to such issuance.

(i) *Use of Proceeds.* The Company will apply the net proceeds from the sale of the Shares as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading “Use of proceeds”.

(j) *No Stabilization.* The Company will not take, directly or indirectly, without giving any effect to the activities by the Underwriters, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Stock.

(k) *Exchange Listing.* The Company will use its reasonable best efforts to list, subject to notice of issuance, the Shares on the NASDAQ Stock Market.

(l) *Reports.* For a period of two years from the date of this Agreement, the Company will furnish to the Representatives, 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 Representatives to the extent they are filed on the Commission’s Electronic Data Gathering, Analysis, and Retrieval system.

(m) *Record Retention*. The Company will, pursuant to reasonable procedures developed in good faith, retain copies of each Issuer Free Writing Prospectus that is not filed with the Commission in accordance with Rule 433 under the Securities Act.

5. Certain Agreements of the Underwriters. Each Underwriter hereby represents and agrees that:

(a) It has not and will not use, authorize use of, refer to or participate in the planning for use of, any “free writing prospectus”, as defined in Rule 405 under the Securities Act (which term includes use of any written information furnished to the Commission by the Company and not incorporated by reference into the Registration Statement and any press release issued by the Company) other than (i) a free writing prospectus that contains no “issuer information” (as defined in Rule 433(h)(2) under the Securities Act) that was not included (including through incorporation by reference) in the Preliminary Prospectus or a previously filed Issuer Free Writing Prospectus, (ii) any Issuer Free Writing Prospectus prepared pursuant to Section 3(c) or Section 4(c) above (including any electronic road show), or (iii) any free writing prospectus prepared by such underwriter and approved by the Company in advance in writing (each such free writing prospectus referred to in clauses (i) or (iii), an “Underwriter Free Writing Prospectus”).

(b) It has not and will not, without the prior written consent of the Company, use any free writing prospectus that contains the final terms of the Shares unless such terms have previously been included in a free writing prospectus filed with the Commission; *provided* that Underwriters may use a term sheet substantially in the form of Annex B hereto without the consent of the Company; *provided further* that any Underwriter using such term sheet shall notify the Company, and provide a copy of such term sheet to the Company, prior to, or substantially concurrently with, the first use of such term sheet.

(c) It is not subject to any pending proceeding under Section 8A of the Securities Act with respect to the offering (and will promptly notify the Company if any such proceeding against it is initiated during the Prospectus Delivery Period).

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 and each Issuer Free Writing Prospectus shall have been timely filed with the Commission under the Securities Act (in the case of an Issuer Free Writing Prospectus, to the extent required by Rule 433 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 Representatives.

(b) *Representations and Warranties*. The representations and warranties of the Company contained herein shall be true and correct 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 on and as of the Closing Date or the Additional Closing Date, as the case may be.

(c) *No Downgrade.* Subsequent to the earlier of (i) the Applicable Time and (ii) the execution and delivery of this Agreement, if there are any debt securities or preferred stock of, or guaranteed by, the Company or any of its subsidiaries that are rated by a “nationally recognized statistical rating organization,” as such term is defined under Section 3(a)(62) under the Exchange Act, (A) no downgrading shall have occurred in the rating accorded any such debt securities or preferred stock and (B) no such organization shall have publicly announced that it has under surveillance or review, or has changed its outlook with respect to, its rating of any such debt securities or preferred stock (other than an announcement with positive implications of a possible upgrading).

(d) *No Material Adverse Change.* No event or condition of a type described in Section 3(f) hereof shall have occurred or shall exist, which event or condition is not described in the Pricing Disclosure Package (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 Representatives 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 Pricing Disclosure Package and the Prospectus.

(e) *Executive Officer's Certificate.* The Representatives 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 satisfactory to the Representatives (i) confirming that such officers have carefully reviewed the Registration Statement, the Pricing Disclosure Package and the Prospectus and, to the knowledge of such officers, the representations set forth in Sections 3(b), 3(c) and 3(d) hereof are true and correct, (ii) confirming that the other representations and warranties of the Company in this Agreement are true and correct and that the Company has complied 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 (iii) to the effect set forth in paragraphs (a), (c) and (d) above.

(f) *Financial Officer's Certificate.* On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, the Representatives shall have received a certificate of the principal financial officer or principal accounting officer of the Company, with respect to certain financial information of the Company, to the effect set forth in Annex C hereto.

(g) *Comfort Letters.* On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, PricewaterhouseCoopers LLP shall have furnished to the Representatives, 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 Representatives, 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 each of the Registration Statement, the Pricing Disclosure Package 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 business days prior to such Closing Date or such Additional Closing Date, as the case may be.

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(h) *Opinion and 10b-5 Statement of Counsel for the Company.* Cooley LLP, counsel for the Company, shall have furnished to the Representatives, at the request of the Company, their 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 Representatives, to the effect set forth in Annexes D-1 and D-2 hereto.

(i) *Opinion of Intellectual Property Counsel for Company.* The Representatives shall have received an opinion, dated such Closing Date, of LeClairRyan, Professional Corporation, special intellectual property counsel for the Company, in the form of Annex E hereto, together with signed or reproduced copies of such letter for each of the other Underwriters.

(j) *Opinion and 10b-5 Statement of Counsel for the Underwriters.* The Representatives 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, addressed to the Underwriters, of Wilson Sonsini Goodrich & Rosati, Professional Corporation, counsel for the Underwriters, with respect to such matters as the Representatives 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.

(k) *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.

(l) *Good Standing.* The Representatives 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 in such other jurisdictions as the Representatives may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.

(m) *Lock-up Agreements.* The “lock-up” agreements, each substantially in the form of Exhibit A hereto, between you and certain shareholders, executive officers and directors of the Company relating to sales and certain other dispositions of shares of Stock or certain other securities, delivered to you on or before the date hereof, shall be full force and effect on the Closing Date or Additional Closing Date, as the case may be.

(n) *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 Representatives such further certificates and documents as the Representatives may reasonably request.

(o) *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 Stock Market, subject to official notice of issuance.

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.

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7. Indemnification and Contribution.

(a) *Indemnification of the Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, reasonable legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), joint or several, that arise out of, or are based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or any amendment or supplement thereto), any Issuer Free Writing Prospectus any road show as defined in Rule 433(h) under the Securities Act (a “road show”) or any Pricing Disclosure Package, or caused by any omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in subsection (b) below.

(b) *Indemnification of the Company.* Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers 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 to the same extent as the indemnity set forth in paragraph (a) above, but only with respect to any losses, claims, damages or liabilities that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to such Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement, the Prospectus (or any amendment or supplement thereto), any Issuer Free Writing Prospectus, any road show or any Pricing Disclosure Package, it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession figure appearing in the fifth paragraph under the caption “Underwriting” and the information contained in the last sentence of the thirteenth paragraph, the fourteenth paragraph and the fifteenth paragraph under the caption “Underwriting”.

(c) *Notice and Procedures.* If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnification may be sought pursuant to either paragraph (a) or (b) above, such person (the “Indemnified Person”) shall promptly notify the person against whom such indemnification may be sought (the “Indemnifying Person”) in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under paragraph (a) or (b) above except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided, further, that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have to an Indemnified Person otherwise than under paragraph (a) or (b) above. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person (who shall not, without the consent of the Indemnified Person, be counsel to the Indemnifying Person) to represent the Indemnified Person and any others entitled to indemnification

pursuant to this Section that the Indemnifying Person may designate in such proceeding and shall pay the fees and expenses in such proceeding and shall pay the fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed in writing to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person that would make separate representation advisable in light of the circumstances; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such fees and expenses shall be paid or reimbursed as they are incurred. Any such separate firm for any Underwriter, its affiliates, directors and officers and any control persons of such Underwriter shall be designated in writing by Leerink Partners LLC and any such separate firm for the Company, its directors, its officers who signed the Registration Statement and any control persons of the Company shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff for which the Indemnified Person is entitled to indemnification pursuant to this Section 7, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement or judgment. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification could have been sought hereunder by such Indemnified Person, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

(d) *Contribution.* If the indemnification provided for in paragraphs (a) and (b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters on the other, from the offering of the Shares or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company, on the one hand, and the Underwriters on the other, in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters on the other, shall be deemed to be in the same respective proportions as the net proceeds (after deducting the underwriting discounts and commissions but before deducting expenses) received by the Company from the sale of the Shares and the total underwriting discounts and commissions received by the Underwriters in connection therewith, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate offering price of the Shares. The relative fault of the Company, on the one hand, and the Underwriters on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) *Limitation on Liability.* The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to paragraph (d) above were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in paragraph (d) above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in paragraph (d) above shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of paragraphs (d) and (e), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Shares exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to paragraphs (d) and (e) are several in proportion to their respective purchase obligations hereunder and not joint.

(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 Person at law or in equity.

8. Effectiveness of Agreement. This Agreement shall become effective as of the date first written above.

9. Termination. This Agreement may be terminated in the absolute discretion of the Representatives, by notice to the Company, if after the execution and delivery of this Agreement and on or 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 or The NASDAQ Stock Market; (ii) trading of the common stock of the Company shall have been suspended on The NASDAQ Stock Market; (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; or (iv) 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 Representatives, 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 Pricing Disclosure Package and the Prospectus.

10. Defaulting Underwriter.

(a) If, on the Closing Date or the Additional Closing Date, as the case may be, any Underwriter defaults on its obligation to purchase the Shares that it has agreed to purchase hereunder on such date, the non-defaulting Underwriters may in their discretion arrange for the purchase of such Shares by other persons satisfactory to the Company on the terms contained in this Agreement. If, within 36 hours after any such default by any Underwriter, the non-defaulting Underwriters do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of 36 hours within which to procure other persons satisfactory to the non-defaulting Underwriters to purchase such Shares on such terms. If other persons become obligated or agree to purchase the Shares of a defaulting Underwriter, either the non-defaulting Underwriters or the Company may postpone the Closing Date or the Additional

Closing Date, as the case may be, for up to five full business days in order to effect any changes that in the opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement and the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement and the Prospectus that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context otherwise requires, any person not listed in Schedule 1 hereto that, pursuant to this Section 10, purchases Shares that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Shares that remain unpurchased on the Closing Date or the Additional Closing Date, as the case may be, does not exceed one-eleventh of the aggregate number of Shares to be purchased on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Shares that such Underwriter agreed to purchase hereunder on such date plus such Underwriter's pro rata share (based on the number of Shares that such Underwriter agreed to purchase on such date) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made.

(c) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Shares that remain unpurchased on the Closing Date or the Additional Closing Date, as the case may be, exceeds one-eleventh of the aggregate amount of Shares to be purchased on such date, or if the Company shall not exercise the right described in paragraph (b) above, then this Agreement or, with respect to any Additional Closing Date, the obligation of the Underwriters to purchase Shares on the Additional Closing Date shall terminate without liability on the part of the non-defaulting Underwriters. Any termination of this Agreement pursuant to this Section 10 shall be without liability on the part of the Company, except that the Company will continue to be liable for the payment of expenses as set forth in Section 11 hereof and except that the provisions of Section 7 hereof shall not terminate and shall remain in effect.

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

#### 11. Payment 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 of the Company 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, any Issuer Free Writing Prospectus, any Pricing Disclosure Package 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; (v) the fees and expenses reasonably incurred in connection with the registration or qualification and determination of eligibility for investment of the Shares under the laws of such jurisdictions as the Representatives may designate and the preparation, printing and distribution of a Blue Sky Memorandum (including the related reasonable fees and expenses of counsel for the Underwriters), if any; (vi) the cost of preparing stock certificates; (vii) the costs and charges of any transfer agent and any registrar; (viii) all expenses and application fees incurred in connection with any filing with, and clearance of the offering by, FINRA (including the related reasonable fees and expenses of counsel for the

Underwriters, not to exceed \$5,000 in the aggregate); (ix) all expenses incurred by the Company in connection with any “road show” presentation to potential investors and (x) all expenses and application fees related to the listing of the Shares on The NASDAQ Stock Market. Except as provided in this Section 11 and Section 7 hereof, the several Underwriters shall pay all of their own costs and expenses, including the fees of their counsel.

(b) If (i) this Agreement is terminated prior to the Closing Date pursuant to clause (ii) of Section 9, (ii) the Company for any reason fails to tender the Shares for delivery to the Underwriters on the Closing Date or (iii) the Underwriters decline to purchase the Shares for any reason permitted under this Agreement (other than pursuant to 10(c) above) on the Closing Date, the Company agrees to reimburse the Underwriters for all reasonable out-of-pocket costs and expenses (including the fees and expenses of their counsel) reasonably incurred by the Underwriters in connection with this Agreement and the offering contemplated hereby; provided, however, that in the event any such termination is effected after the Closing Date but prior to any Additional Closing Date with respect to the purchase of any Option Shares, the Company shall only reimburse the Underwriters for all reasonable out-of-pocket costs and expenses (including the fees and expenses of their counsel) reasonably incurred by the Underwriters after the Closing Date in connection with the proposed purchase of any such Option Shares.

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 herein, and the affiliates of each Underwriter 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. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act, the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

16. 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 Representatives c/o Leerink Partners LLC, One Federal Street, 37th Floor, Boston, MA 02110, Attention: Jack Fitzgerald and Wells

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Fargo Securities, LLC, 375 Park Avenue, 4th Floor, New York, New York 10152, Attention: Equity Syndicate Department (fax no: 212-214-5918). Notices to the Company shall be given to it at Alder BioPharmaceuticals, Inc., 11804 North Creek Parkway South, Bothell, WA 98011, Attention: Chief Executive Officer, with copies to Alder BioPharmaceuticals, Inc., 11804 North Creek Parkway South, Bothell, WA 98011, Attention: General Counsel and to Cooley LLP, 1700 Seventh Avenue, Suite 1900, Seattle, WA 98199; Attention: Sonya F. Erickson (fax: (206) 452-8800).

(b) *Governing Law.* This Agreement and any claim, controversy or dispute arising under or related to this Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed in such state.

(f) *Waiver of Jury Trial.* Each of the parties hereto hereby waives any right to trial by jury in any suit or proceeding arising out of or relating to this Agreement.

(g) *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.

(h) *Submission to Jurisdiction.* The Company hereby submits to the exclusive jurisdiction of the U.S. federal and New York state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company waives any objection which it may now or hereafter have to the laying of venue of any such suit or proceeding in such courts. The Company agrees that final judgment in any such suit, action or proceeding brought in such court shall be conclusive and binding upon the Company and may be enforced in any court to the jurisdiction of which Company is subject by a suit upon such judgment.

(i) *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.

(j) *Headings.* The 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.

[Signature Page Follows]

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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,

ALDER BIOPHARMACEUTICALS, INC.

By: /s/ Randall C. Schatzman

Name: Randall C. Schatzman, Ph.D.

Title: President and CEO

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Accepted: As of the date first written above

For themselves and on behalf of the  
several Underwriters listed  
in Schedule 1 hereto.

LEERINK PARTNERS LLC

By: /s/ John I. Fitzgerald, Esq.  
Name: John I. Fitzgerald, Esq.  
Title: Managing Director

WELLS FARGO SECURITIES, LLC

By: /s/ David Herman  
Name: David Herman  
Title: Director

| <u>Underwriter</u>          | <u>Number of Shares</u> |
|-----------------------------|-------------------------|
| Leerink Partners LLC        | 7,500,000               |
| Wells Fargo Securities, LLC | 6,000,000               |
| Needham & Company, LLC      | 1,500,000               |
| Total                       | 15,000,000              |

a. **Pricing Disclosure Package**

Pricing Information Provided Orally by Underwriters

|   |                   |
|---|-------------------|
| Public offering price:                  | \$10.00 per share |
| Number of Underwritten Shares:          | 15,000,000        |
| Number of Option Shares:                | 2,250,000         |
| Underwriting Discounts and Commissions: | \$ 0.60 per share |

ALDERBIOPHARMACEUTICALS, INC.

Pricing Term Sheet

None.

Form of Certificate of the Principal Financial and Accounting Officer

Form of Opinion of Counsel for the Company

Form of Opinion of IP Counsel for the Company

## FORM OF LOCK-UP AGREEMENT

July , 2017

Leerink Partners LLC  
Wells Fargo Securities, LLC,  
As Representatives of the  
several Underwriters listed  
in Schedule 1 hereto

c/o Leerink Partners LLC  
201 Spear Street, Suite 1620,  
San Francisco, California 94105-1699

c/o Wells Fargo Securities, LLC  
375 Park Avenue, 4th Floor  
New York, New York 10152

Re: ALDER BIOPHARMACEUTICALS — Public Offering

Ladies and Gentlemen:

The undersigned understands that you, as Representatives of the several Underwriters, propose to enter into an underwriting agreement (the “Underwriting Agreement”) with Alder Biopharmaceuticals, Inc., a Delaware corporation (the “Company”), providing for the public offering (the “Public Offering”) by the several Underwriters named in Schedule 1 to the Underwriting Agreement (the “Underwriters”), of common stock, par value \$0.0001 per share, of the Company (the “Securities”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriters’ agreement to purchase and make the Public Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of each of Leerink Partners LLC and Wells Fargo Securities, LLC, on behalf of the Underwriters, the undersigned will not, during the period beginning on the date of this letter agreement (this “Letter Agreement”) and ending [45/60] days after the date of the prospectus relating to the Public Offering (the “Prospectus”) (such period, the “Restricted Period”), (1) 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, any shares of Common Stock, \$0.0001 per share par value, of the Company (the “Common Stock”) or any securities convertible into or exercisable or exchangeable for Common Stock (including without limitation, Common Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant), or publicly disclose the intention to make any offer, sale, pledge or disposition, (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) make any demand for or exercise any right with respect to the registration of any shares of Common Stock or

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any security convertible into or exercisable or exchangeable for Common Stock, in each case other than:

(A) transfers of shares of Common Stock:

(i) as a bona fide gift or gifts;

(ii) to the spouse, domestic partner, parent, child or grandchild of the undersigned (each, an “immediate family member”) or to a trust formed for the direct or indirect benefit of the undersigned or an immediate family member;

(iii) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned;

(iv) if the undersigned is an individual, solely by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement;

(v) to the Company either (a) pursuant to any contractual arrangement in effect on the date of this Letter Agreement that provides for the repurchase of the undersigned’s Securities by the Company or (b) in connection with the termination of the undersigned’s employment with the Company;

(vi) in connection with a merger or sale of all or substantially all of the Company, regardless of how such a transaction is structured (it being further understood that this Letter Agreement shall not restrict the undersigned from entering into any agreement or arrangement in connection therewith, including an agreement to vote in favor of, or tender Securities in, any such transaction or taking any other action in connection with any such transaction);

(vii) if the undersigned is a corporation, partnership or other business entity (y) to another corporation, partnership or other business entity that controls, is controlled by or is under common control with the undersigned or (z) as part of a disposition, transfer or distribution without consideration by the undersigned to its equity holders, general partners or limited partners; or

(viii) if the undersigned is a trust, to a trustee or beneficiary of the trust;

*provided* that in the case of any transfer or distribution pursuant to this clause (A), each transferee, donee or distributee shall execute and deliver to the Underwriters a copy of this Letter Agreement; and provided, further, that no filing under Section 16(a) of the Exchange Act or other public announcement shall be required or shall be voluntarily made during the Restricted Period;

(B) the transfer of Securities to the Company upon a vesting event of the Securities or upon the exercise of options to purchase Securities, in each case on a “cashless” or “net exercise” basis or to cover tax withholding obligations of the undersigned in connection with such vesting or exercise; provided that no filing under Section 16(a) of the Exchange Act or other public announcement shall be required or shall be voluntarily made in connection with such vesting or exercise;

(C) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Securities; provided that such plan does not provide for the transfer of Securities during the Restricted Period and no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required of or made voluntarily by or on behalf of the undersigned or the Company; or

(D) the transfer of Securities under a trading plan pursuant to Rule 10b5-1 under the Exchange Act that is existing as of the date hereof, provided that to the extent a public announcement or filing under the Exchange Act is required of the undersigned or the Company regarding the sale, such announcement or filing shall include a statement to the effect that the sale occurred pursuant to such trading plan pursuant to Rule 10b5-1.

In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the registration or transfer of the securities described herein, are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Letter Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Letter Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that, (i) if the Underwriting Agreement does not become effective by July 26, 2017, (ii) if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder, or (iii) the Company notifies Leerink Partners LLC and Wells Fargo Securities, LLC in writing that it does not intend to proceed with the Public Offering, then the undersigned shall be released from, all obligations under this Letter Agreement. The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Letter Agreement.

This Letter Agreement and any claim, controversy or dispute arising under or related to this Letter Agreement shall be governed by and construed in accordance with the laws of the State of New York.

Very truly yours,

[ *NAME OF STOCKHOLDER* ]

By: \_\_\_\_\_

Name:

Title:



July 12, 2017

Alder BioPharmaceuticals, Inc.  
11804 North Creek Parkway South  
Bothell, WA 98011

Ladies and Gentlemen:

We have acted as counsel to Alder BioPharmaceuticals, Inc., a Delaware corporation (the “*Company*”), in connection with the offering of up to 17,250,000 shares of the Company’s common stock, par value \$0.0001 per share (the “*Shares*”), including up to 2,250,000 shares that may be sold pursuant to the exercise of an option to purchase additional shares, pursuant to the Registration Statement on Form S-3 (Registration Statement No. 333-216199) (the “*Registration Statement*”) filed with the Securities and Exchange Commission (the “*Commission*”) under the Securities Act of 1933, as amended (the “*Act*”), the prospectus included in the Registration Statement (the “*Base Prospectus*”), and the prospectus supplement relating to the Shares to be filed with the Commission pursuant to Rule 424(b) promulgated under the Act (the “*Prospectus Supplement*”) and, together with the Base Prospectus, the “*Prospectus*”). The Company has requested our opinion in connection with certain related matters.

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company’s Certificate of Incorporation and Bylaws, each as currently in effect and (c) originals, or copies certified to our satisfaction, of such records, documents, certificates, opinions, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters. We have assumed the genuineness and authenticity of all signatures on original documents; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies thereof; and the accuracy, completeness and authenticity of certificates of public officials.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that the laws of any other jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that, the Shares, when sold and issued in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

We hereby consent to the reference to our firm under the caption “Legal Matters” in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement.

Cooley LLP 1700 Seventh Avenue Suite 1900 Seattle, WA 98101-1355  
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July 12, 2017  
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Sincerely,

C OOLEY LLP

By: /s/ Alan Hambelton  
Alan Hambelton

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