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

FORM 8-K

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

Date of Report (Date of earliest event reported): February 28, 2018

ATARA BIOTHERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-36548
(Commission
File Number)

46-0920988
(IRS Employer
Identification No.)

Atara Biotherapeutics, Inc.
611 Gateway Boulevard, Suite 900
South San Francisco, CA 94080
(Address of principal executive offices, including zip code)

(650) 278-8930
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report.)

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

- 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.

Item 8.01. Other Events.

On February 28, 2018, Atara Biotherapeutics, Inc. (“Atara” or “the Company”) entered into an underwriting agreement, or the Underwriting Agreement, with J.P. Morgan Securities LLC and Cowen and Company, LLC, as representatives of the several underwriters named therein, collectively, the Underwriters, relating to the public offering, issuance and sale of 4,285,714 shares of the Company’s common stock, par value \$0.0001 per share, or the Common Stock. The price to the public in this offering is \$35.00 per share, and the Underwriters have agreed to purchase the shares from the Company pursuant to the Underwriting Agreement at a price of \$32.90 per share. Under the terms of the Underwriting Agreement, Atara also granted the Underwriters an option exercisable for 30 days to purchase up to an additional 642,857 shares of Common Stock at the public offering price, less underwriting discounts and commissions. The gross proceeds to the Company from this offering are expected to be approximately \$150.0 million, before deducting underwriting discounts and commissions and other estimated offering expenses payable by the Company, or \$172.5 million if the Underwriters exercise in full their option to purchase additional shares of Common Stock. The offering is expected to close on March 5, 2018, subject to customary closing conditions.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The 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, including being qualified by confidential disclosures exchanged between the parties in connection with the execution of the Underwriting Agreement.

The offering is being made pursuant to the Company’s effective registration statement on Form S-3 and an accompanying prospectus (Registration Statement No. 333-223262) previously filed with the SEC and a preliminary and final prospectus supplement thereunder. The Underwriting Agreement is filed as Exhibit 1.1 to this report, and the description of the material 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</u>	<u>Description</u>
1.1	<u>Underwriting Agreement, dated as of February 28, 2018, by and among Atara Biotherapeutics, Inc., J.P. Morgan Securities LLC and Cowen and Company, LLC.</u>
5.1	<u>Opinion of Cooley LLP.</u>
23.1	<u>Consent of Cooley LLP (contained in Exhibit 5.1).</u>

SIGNATURES

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

Atara Biotherapeutics, Inc.

Dated: March 2, 2018

By: /s/ John McGrath

John McGrath
Chief Financial Officer

Atara Biotherapeutics, Inc.

Common Stock

Underwriting Agreement

February 28, 2018

J.P. Morgan Securities LLC
Cowen and Company, LLC
As Representatives of the
several Underwriters listed
in Schedule 1 hereto

c/o J.P. Morgan Securities LLC
383 Madison Avenue
New York, New York 10179

c/o Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

Ladies and Gentlemen:

Atara Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), proposes to issue and sell to the several underwriters listed in Schedule 1 hereto (the “**Underwriters**”), for whom you are acting as representatives (the “**Representatives**”), an aggregate of 4,285,714 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 642,857 shares of common stock, par value \$0.0001 per share, of the Company (the “**Option Shares**”). The Underwritten Shares and the Option Shares are herein referred to as the “**Shares**”.

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 (File No. 333-223262), including a prospectus, relating to the Shares. Such registration statement, as amended 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 preliminary prospectus supplement of the Company dated as of February 27, 2018 and filed with the Commission pursuant to Rule 424(a) under the Securities Act together with the prospectus included in the Registration Statement at the time of its effectiveness that omitted Rule 430 Information, and the term “**Prospectus**” means 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 together with the prospectus included in the Registration Statement at the time of its effectiveness that omitted Rule 430 Information. If the Company has filed an abbreviated registration statement pursuant to Rule 462(b) under the

Securities Act (the “**Rule 462 Registration Statement**”), then any reference herein to the term “Registration Statement” shall be deemed to include such Rule 462 Registration Statement. 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 hereto, the “**Pricing Disclosure Package**”): a Preliminary Prospectus dated February 27, 2018 and each “free-writing prospectus” (as defined pursuant to Rule 405 under the Securities Act) listed on Annex A hereto.

“Applicable Time” means 6:00 P.M., New York City time, on February 28, 2018.

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 \$32.90.

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). 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 Davis Polk & Wardwell LLP, 1600 El Camino Real, Menlo Park, California 94025 at 10:00 A.M., New York City time, on March 5, 2018 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 or the Additional Closing Date, as the case may be, 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 ("**DTC**") unless the Representatives shall otherwise instruct. The certificates for the Shares will be made available for inspection and packaging by the Representatives at the office of DTC or its designated custodian not later than 1:00 P.M., New York City time, on the business day prior to the Closing Date or the Additional Closing Date, as the case may be.

(d) The Company acknowledges and agrees that the Underwriters are acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Shares contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. Additionally, neither the 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 is in effect, 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 (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) the documents listed on Annex A hereto, 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) *Emerging Growth Company.* From the time of initial filing of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an “emerging growth company,” as defined in Section 2(a) of the Securities Act (an “**Emerging Growth Company**”). “**Testing-the-Waters Communication**” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(e) *Testing-the-Waters Materials.* The Company (i) has not alone engaged in any Testing-the-Waters Communications in connection with the offering of the Shares other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are accredited investors within the meaning of Rule 501 under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications in connection with the offering of the Shares. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications by virtue of a writing substantially in the form of Exhibit A hereto. The Company has not distributed or approved for distribution any Written Testing-the-Waters Communications other than those listed on Annex B hereto. “**Written Testing-the-Waters Communication**” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act. Any individual Written Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement or the Pricing Disclosure Package, complied in all material respects with the Securities Act, and when taken together with 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.

(f) *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 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.

(g) *Incorporated Documents.* The documents incorporated by reference in the Registration Statement, the Prospectus and the Pricing Disclosure Package, when they became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Securities Act or the 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 become effective or are filed with the Commission, as the case may be, will conform in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, 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.

(h) *Financial Statements.* The financial statements (including the related notes thereto) of the Company and its consolidated subsidiaries included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly the financial position of the Company and its consolidated subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles (“GAAP”) in the United States applied on a consistent basis throughout the periods covered thereby, and any supporting schedules included or incorporated by reference in the Registration Statement present fairly the information required to be stated therein; and the other financial information included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus has been derived from the accounting records of the Company and its consolidated subsidiaries and presents fairly the information shown thereby in the Registration Statement, the Pricing Disclosure Package and the Prospectus have been prepared in accordance with the applicable requirements of the Securities Act and the Exchange Act, as applicable.

(i) *No Material Adverse Change.* Neither the Company nor any of its subsidiaries has sustained since the date of the latest audited financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure

Package and the Prospectus any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and, since the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there has not been any change in the capital stock (other than as a result of (A) the exercise or settlement (including any “net” or “cashless” exercise or settlements) of outstanding stock options, restricted stock units or warrants, (B) the award of stock options or restricted stock units in the ordinary course of business pursuant to the Company’s equity incentive plans that are described in the Registration Statement, the Pricing Disclosure Package and the Prospectus or (C) the repurchase of stock options from employees or consultants terminating their service to the Company) or long term debt of the Company or any of its subsidiaries or any material adverse change, or any development involving a prospective material adverse change, in or affecting the general affairs, management, financial position, stockholders’ equity or results of operations of the Company and its subsidiaries, taken as a whole, otherwise than as set forth or contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(j) *Organization and Good Standing.* The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own its properties and conduct its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and has been duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, except where the failure to be so qualified or be in good standing would not individually or in the aggregate have a material adverse effect on the current or future financial position, stockholders’ equity or results of operations of the Company and its subsidiaries, taken as a whole (a “**Material Adverse Effect**”); and each subsidiary of the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation.

(k) *Capitalization.* The Company has an authorized capitalization as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading “Capitalization”; all of the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights; except as described in or expressly contemplated by the Pricing Disclosure Package and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company or any of its subsidiaries, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company or any such subsidiary, any such convertible or exchangeable securities or any such rights, warrants or options; the capital stock of the Company conforms in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and all the outstanding shares of capital stock or other equity interests of each subsidiary owned, directly or indirectly, by the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of any lien, charge, encumbrance, security interest, restriction on voting or transfer or any other claim of any third party.

(l) *Due Authorization.* The Company has full right, power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and all action required to be taken for the due and proper authorization, execution and delivery by it of this Agreement and the consummation by it of the transactions contemplated hereby has been duly and validly taken.

(m) *Underwriting Agreement.* This Agreement has been duly authorized, executed and delivered by the Company.

(n) *The Shares.* The Shares to be issued and sold by the Company hereunder have been duly authorized and, when issued and delivered and paid for as provided herein, will be duly and validly issued, will be fully paid and nonassessable.

(o) *No Violation or Default.* Neither the Company nor any of its subsidiaries is (A) in violation of its Certificate of Incorporation, By-laws or similar organizational documents, (B) in default in the performance or observance of any material obligation, agreement, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound, or (C) in violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties except in the case of (B) or (C) for such defaults as would not, individually or in the aggregate, have a Material Adverse Effect.

(p) *No Conflicts.* The issue and sale of the Shares and the compliance by the Company with this Agreement and the consummation of the transactions herein contemplated will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, (A) any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, (B) the Certificate of Incorporation or By-laws of the Company, or (C) any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties; except in the case of (A) and (C) for such violations that would not individually or in the aggregate have a Material Adverse Effect; and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body is required for the issue and sale of the Shares or the consummation by the Company of the transactions contemplated by this Agreement, except for the registration under the Securities Act of the Shares, the approval by the Financial Industry Regulatory Authority (“**FINRA**”) of the underwriting terms and arrangements and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters.

(q) The statements set forth in the Pricing Disclosure Package and the Prospectus under the caption “Description of Capital Stock”, insofar as they purport to constitute a summary of the terms of the Stock, under the caption “Material US Federal Income Tax Consequences to Non-US Holders of Our Common Stock”, and under the

caption “Underwriting”, insofar as they purport to describe the provisions of the laws and legal conclusions with respect thereto and documents referred to therein, are accurate, complete and fair, in all material respects.

(r) *Legal Proceedings.* Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings (“**Actions**”) pending to which the Company or any of its subsidiaries is or may be a party or which any property of the Company or any of its subsidiaries is or may be the subject that, individually or in the aggregate, if determined adversely to the Company or any of its subsidiaries, could reasonably be expected to have a Material Adverse Effect; to the knowledge of the Company, no such Actions are threatened or contemplated by any governmental or regulatory authority or threatened by others.

(s) *Independent Accountants.* Deloitte & Touche LLP, which has certified certain financial statements of the Company and its subsidiaries contained or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, is an independent registered public accounting firm as required by the Securities Act and the rules and regulations of the Commission thereunder.

(t) *Title to Real and Personal Property.* The Company and its subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them, in each case free and clear of all liens, encumbrances and defects except such as are described in the Registration Statement, the Pricing Disclosure Package and the Prospectus or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases (subject to the effects of (A) bankruptcy, insolvency, fraudulent conveyance, fraudulent transfer, reorganization, moratorium or other similar laws relating to or affecting the rights or remedies of creditors generally; (B) the application of general principles of equity (including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether enforcement is considered in proceedings at law or in equity); and (C) applicable law and public policy with respect to rights to indemnity and contribution) with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries, taken as a whole.

(u) *Intellectual Property.* Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company and its subsidiaries own, possess, license or have an exclusive option to license adequate rights to use all patents, trademarks, service marks, trade names, copyrights, domain names, licenses, approvals, technology and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) and other intellectual property rights, including registrations and applications for registration thereof (collectively, “**Intellectual Property Rights**”) used or held to be used for the conduct of the Company’s business now conducted and as proposed in the Registration Statement, the Pricing Disclosure Package and the Prospectus to be conducted, except where the failure to own, possess or license such Intellectual Property Rights 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 and to the

Company's knowledge: (i) neither the Company nor any of its subsidiaries has materially infringed, misappropriated or otherwise violated the Intellectual Property Rights of any third party, and neither the manufacture of, nor the use or sale of, any of the product candidates described in the Registration Statement, the Pricing Disclosure Package and the Prospectus will materially infringe or otherwise violate the Intellectual Property Rights of any third party and (ii) there are no rights of third parties to any of the Intellectual Property Rights owned by or exclusively licensed to the Company or any of its subsidiaries. Except as would not, individually or in aggregate, if determined adversely to the Company or any of its subsidiaries, reasonably be expected to have a Material Adverse Effect, there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by any third party (i) challenging the Company's or any of its subsidiaries' rights in or to any of the Company's Intellectual Property Rights; (ii) alleging that the Company or any of its subsidiaries have infringed, misappropriated or otherwise violated any Intellectual Property Rights of any third party; or (iii) challenging the validity, scope or enforceability of any Intellectual Property Rights owned or exclusively licensed to the Company or any of its subsidiaries, and in the case of each of (i), (ii) and (iii), the Company is unaware of any facts that would form a reasonable basis for any such action, suit, proceeding or claim. To the Company's knowledge, there is no infringement, misappropriation, breach or default by others of any Intellectual Property Rights owned by or exclusively licensed to the Company or any of its subsidiaries, and all Intellectual Property Rights owned by or licensed to the Company or any of its subsidiaries are valid and enforceable, except as would not reasonably be expected, individually or in aggregate, to have a Material Adverse Effect. The Company and its subsidiaries have at all times taken reasonable steps in accordance with normal industry practice to maintain the confidentiality of all Intellectual Property Rights, the value of which to the Company and to its subsidiaries is contingent upon maintaining the confidentiality thereof. All founders, current and former employees and consultants involved in the development of the Intellectual Property Rights for the Company or any of its subsidiaries have signed confidentiality and invention assignment agreements with the Company or any of its subsidiaries pursuant to which the Company or any of its subsidiaries either (i) has obtained ownership of and is the exclusive owner of such Intellectual Property Rights, or (ii) has obtained a valid and unrestricted right to exploit such Intellectual Property Rights, sufficient for the conduct of the business as currently conducted and as proposed in the Registration Statement, the Pricing Disclosure Package and the Prospectus to be conducted

(v) *No Undisclosed Relationships.* No relationship, direct or indirect, exists between or among the Company or any of its subsidiaries, on the one hand, and the directors, officers, stockholders, customers, suppliers or other affiliates of the Company or any of its subsidiaries, on the other, that is required by the Securities Act to be described in each of the Registration Statement and the Prospectus and that is not so described in such documents and in the Pricing Disclosure Package.

(w) *Investment Company Act.* The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, will not be an "investment company" or an entity "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder (collectively, the "**Investment Company Act**").

(x) *Taxes.* The Company and its subsidiaries have filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have received extensions thereof (except where the failure to file would not, individually or in the aggregate, have a Material Adverse Effect) and have paid all taxes required to be paid thereon (except for cases in which the failure to pay would not have a Material Adverse Effect, or, except as currently being contested in good faith and for which reserves required by U.S. generally accepted accounting principles have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company or any of its subsidiaries which has had (nor has the Company nor any of its subsidiaries received any notice of any tax deficiency from any taxing authority which is reasonably expected to be determined adversely to the Company or its subsidiaries and which is reasonably expected to have) a Material Adverse Effect.

(y) *Licenses and Permits.* The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct its business, including, without limitation, from the U.S. Food and Drug Administration (“FDA”) and equivalent foreign regulatory authorities other than those the failure to possess or own would not reasonably be expected to result in a Material Adverse Effect, and the Company has not received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit, which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a Material Adverse Effect, except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(z) *Compliance with the FDA.* The Company has operated and currently is in compliance with all applicable rules, regulations and policies 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.

(aa) *Clinical Trials.* Any clinical trials and human studies conducted by the Company and, to the knowledge of the Company, any clinical trials and human studies conducted on behalf of the Company or in which the Company has participated were and, if still pending, are being conducted in accordance with standard medical and scientific research procedures and any applicable rules, regulations and policies of the jurisdiction in which such trials and studies are being conducted, except where the failure to be so conducted would not reasonably be expected to have a Material Adverse Effect.

(bb) *Disclosure Controls.* The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) that comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that material information relating to the Company and its subsidiaries is made known to the Company’s principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective.

(cc) *Accounting Controls.* The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that complies with the requirements of the Exchange Act and has been designed by the Company’s principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurance regarding the reliability of

financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States and, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company is not aware of any material weaknesses in its internal control over financial reporting (it being understood that, as of the date hereof, the Company is not required to comply with Section 404 of the Sarbanes Oxley Act of 2002). Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, since the date of the latest audited financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there has been no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting

(dd) *No Unlawful Payments.* None of the Company, nor any of Nina Biotherapeutics, Inc., Pinta Biotherapeutics, Inc. or Santa Maria Biotherapeutics, Inc. (collectively, the "**Predecessor Entities**"), nor any of their respective subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person associated with or acting on behalf of the Company, the Predecessor Entities or any of their subsidiaries has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any foreign or domestic government official or employee, including of any 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; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company and its subsidiaries have instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote and ensure compliance with all applicable anti-bribery and anti-corruption laws.

(ee) *Compliance with Anti-Money Laundering Laws.* The operations of the Company, the Predecessor Entities and their subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions where the Company or any of its subsidiaries conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the "**Anti-Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(ff) *No Conflicts with Sanctions Laws.* Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any directors, officers, employees, agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. government, (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury (“**OFAC**”) or the U.S. Department of State and including, without limitation, the designation as a “specially designated national” or “blocked person”), the United Nations Security Council (“**UNSC**”), the European Union, Her Majesty’s Treasury (“**HMT**”) or other relevant sanctions authority (collectively, “**Sanctions**”), nor is the Company or any of its subsidiaries located, organized or resident in a country or territory that is the subject or target of Sanctions, including, without limitation, Cuba, Iran, North Korea, Syria and Crimea (each, a “**Sanctioned Country**”); and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five years, the Company and its subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

(gg) *No Registration Rights.* Except such rights as have been validly waived and that are described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus, no person has the right to require the Company or any of its subsidiaries to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Shares.

(hh) *No Stabilization.* The Company has not taken, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(ii) *Statistical and Market Data.* Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included or incorporated by reference in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

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 promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 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.

(b) *Delivery of Copies.* The Company will deliver, without charge, (i) to each Representative, a signed copy of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith and documents incorporated by reference therein; and (ii) to each Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and documents incorporated by reference therein 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 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, the Company will furnish to each Representative 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 Representative.* 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 Written Testing-the-Waters Communication or any amendment to the Prospectus has been filed or distributed; (iv) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information including, but not limited to, any request for information concerning any Testing-the-Waters Communication; (v) 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, any of the Pricing Disclosure Package, the Prospectus or any Written Testing-the-Waters Communication or the initiation or threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (vi) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, any of the Pricing Disclosure Package, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication 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, any such Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication is delivered to a purchaser, not misleading; (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 any Written Testing-the-Waters Communication 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.* (1) If during the Prospectus Delivery Period (i) 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 (ii) 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 (2) if at any time prior to the Closing Date (i) 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 (ii) 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) *Earnings Statement.* The Company will make generally available to its security holders and the Representatives as soon as practicable an earnings 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 securities of the Company that are substantially similar to the Shares, including but not limited to any options or warrants to purchase shares of common stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock of the Company or any such substantially similar 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 common stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, without the prior written consent of J.P. Morgan Securities LLC; provided, however, that the foregoing restrictions shall not apply to (A) the Shares sold hereunder, (B) the issuance by the Company of shares of common stock upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof, (C) the issuance by the Company of common stock or other securities convertible or exercisable into common stock, in each case pursuant to the Company’s and its subsidiaries’ stock plans that are described in the Pricing Disclosure Package and the Prospectus, (D) the filing of a registration statement on Form S-8 or any successor form thereto with respect to the registration of securities to be offered under any employee benefit or equity incentive plans of the Company or its subsidiaries, or (E) the issuance of shares of common stock or any security convertible into or exercisable for shares of common stock in connection with transactions that include a commercial relationship (including without limitation, joint ventures, marketing or distribution arrangements, collaboration agreements or intellectual property license agreements) or any acquisition by the Company or any of its subsidiaries of the securities, business, property or other assets of another person or entity or pursuant to any employee benefit plan assumed by the Company in connection with such acquisition, and the issuance of any such securities pursuant to any such agreement; provided further, that, in the case of clause (E), the aggregate number of shares of common stock that the Company may sell or issue or agree to sell or issue shall not exceed 5% of the total number of shares of common stock issued and outstanding immediately following the completion of the transactions contemplated by this Agreement, and provided further that the Company shall cause each recipient of such securities to execute and deliver to you, on or prior to the issuance of such securities, a lock-up letter as described in Section 6(m) hereof (and with the same date of expiration), and enter stop transfer instructions with the Company’s transfer agent and registrar of such securities, which the Company agrees it will not waive or amend without the prior written consent of J.P. Morgan Securities LLC.

(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, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the common stock.

(k) *Exchange Listing.* The Company will use its reasonable best efforts to list for quotation the Shares on Nasdaq.

(l) *Reports.* So long as the Shares are outstanding, the Company will furnish to the Representatives, as soon as 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.

(n) *Emerging Growth Company.* The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of Shares within the meaning of the Securities Act and (ii) completion of the 60-day restricted period referred to in Section 4(h) hereof.

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 listed on Annex A or 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.

(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 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 Ratings.* There are (and prior to the Closing Date, will be) no debt securities or preferred stock issued 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.

(d) *No Material Adverse Change.* No event or condition of a type described in Section 3(i) 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) *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 the representations and warranties of the Company set forth in Section 3 of 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) *Comfort Letters.* (i) On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, Deloitte & Touche 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.

(g) *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, substantially in the form and substance reasonably satisfactory to the Representatives.

(h) *Opinion of Intellectual Property Counsel for the Company.* Jones Day, intellectual property counsel for the Company, shall have furnished to you its written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(i) *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 Davis Polk & Wardwell LLP, 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.

(j) *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.

(k) *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.

(l) *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 Nasdaq subject only to official notice of issuance.

(m) *Lock-up Agreements.* The "lock-up" agreements, each substantially in the form of Exhibit B hereto, between you and certain shareholders, officers and directors of the Company relating to sales and certain other dispositions of shares of common 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.

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.

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, 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 "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Securities Act, any Written Testing-the-Waters Communication, any road show as defined in Rule 433(h) under the Securities Act (a "**road show**") or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), 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 Written Testing-the-Waters Communication, any road show or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), 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 and reallowance figures appearing in the third paragraph under the caption “Underwriting”, the information contained in the sixteenth 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 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; 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 the Representatives 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, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested that an Indemnifying Person reimburse the Indemnified Person for fees and expenses of counsel as contemplated by this paragraph, the Indemnifying Person shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by the Indemnifying Person of such request and (ii) the Indemnifying Person shall not have reimbursed the Indemnified Person in accordance with such request prior to the date of such settlement. 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) in this Section 7 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 (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 paragraphs 7(a) through 7(e) 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 Nasdaq; (ii) trading of any securities issued or guaranteed by the Company shall have been suspended on any exchange or in any over-the-counter market; (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; 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 I 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 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 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 fees and expenses of counsel for the Underwriters not to exceed \$2,500); (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, up to a maximum of \$20,000; (ix) all expenses incurred by the Company in connection with any "road show" presentation to potential investors; (x) all expenses and application fees related to the listing of the Shares on Nasdaq and (xi) any stamp or transfer taxes in connection with the original sale and issuance of the Shares.

(b) If (i) this Agreement is terminated pursuant to Section 9, (ii) the Company for any reason fails to tender the Shares for delivery to the Underwriters or (iii) the Underwriters decline to purchase the Shares for any reason permitted under this Agreement, the Company agrees to reimburse the Underwriters for all 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.

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; (c) the term “subsidary” has the meaning set forth in Rule 405 under the Securities Act; and (d) the term “significant subsidiary” has the meaning set forth in Rule 1-02 of Regulation S-X under the Exchange Act.

15. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), 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 J.P. Morgan Securities LLC, 383 Madison Avenue, New York, New York 10179 (fax: (212) 622-8358), attention: Equity Syndicate Desk; c/o Cowen and Company, LLC, 599 Lexington Avenue, 27th Floor, New York, NY 10022 (fax: (646) 562-1124), attention: General Counsel. Notices to the Company shall be given to it at Atara Biotherapeutics, Inc., 611 Gateway Blvd., Suite 900, South San Francisco, California 94080; attention: CFO and General Counsel with a copy to Cooley LLP, 101 California Street, 5th Floor, San Francisco, California 94111; fax no. 415-693-2222, attention: Jodie Bourdet.

(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.

(c) *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.

(d) *Counterparts*. This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.

(e) *Amendments or Waivers*. No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.

(f) *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.

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,

ATARA BIOTHERAPEUTICS, INC.

By: /s/ John McGrath

Name: John McGrath

Title: Chief Financial Officer

Accepted: As of the date first written above

J.P. MORGAN SECURITIES LLC

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

By: /s/ Ben Burdett

Name: Ben Burdett

Title: Executive Director

COWEN AND COMPANY, LLC

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

By: /s/ E. James Streator

Name: E. James Streator, III

Title: Managing Director

<u>Underwriter</u>	<u>Number of Shares</u>
J.P. Morgan Securities LLC	2,057,143
Cowen and Company, LLC	1,328,571
Canaccord Genuity Inc.	514,286
Mizuho Securities USA LLC	385,714
Total	4,285,714

a. Pricing Disclosure Package

None

b. Pricing Information Provided Orally by Underwriters

Underwritten Shares offered: 4,285,714

Option Shares offered: 642,857

Price to Public: \$35.00 per share

Written Testing-the-Waters Communications

None

EGC – Testing the waters authorization (to be delivered by the issuer to J.P. Morgan and Cowen and Company in email or letter form)

In reliance on Section 5(d) of the Securities Act of 1933, as amended (the “**Securities Act**”), Atara Biotherapeutics, Inc. (the “**Issuer**”) hereby authorizes J.P. Morgan Securities LLC (“**J.P. Morgan**”) and its affiliates and their respective employees and Cowen and Company, LLC (“**Cowen**”) and its affiliates and their respective employees to engage on behalf of the Issuer in oral and written communications with potential investors that are “qualified institutional buyers”, as defined in Rule 144A under the Securities Act, or institutions that are “accredited investors”, as defined in Regulation D under the Securities Act, to determine whether such investors might have an interest in the Issuer’s contemplated offering (“**Testing-the-Waters Communications**”). A “**Written Testing-the Waters Communication**” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

The Issuer represents that it is an “emerging growth company” as defined in Section 2(a)(19) of the Securities Act (“**Emerging Growth Company**”) and agrees to promptly notify J.P. Morgan and Cowen in writing if the Issuer hereafter ceases to be an Emerging Growth Company while this authorization is in effect. If at any time following the distribution of any Written Testing-the-Waters Communication there occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Issuer will promptly notify J.P. Morgan and Cowen and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

Nothing in this authorization is intended to limit or otherwise affect the ability of J.P. Morgan or Cowen, and each of their affiliates and their respective employees, to engage in communications in which they could otherwise lawfully engage in the absence of this authorization, including, without limitation, any written communication containing only one or more of the statements specified under Rule 134(a) under the Securities Act. This authorization shall remain in effect until the Issuer has provided to J.P. Morgan and Cowen a written notice revoking this authorization. All notices as described herein shall be sent by email to the attention of Mike Gaito at mike.gaito@jpmorgan.com and Tanya Joseph at tanya.joseph@cowen.com.

FORM OF LOCK-UP AGREEMENT

, 2018

J. P. MORGAN SECURITIES LLC
COWEN AND COMPANY, LLC

As Representatives of
the several Underwriters listed in
Schedule 1 to the Underwriting
Agreement referred to below

c/o J. P. Morgan Securities LLC
383 Madison Avenue
New York, NY 10179

c/o Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

Re: Atara Biotherapeutics, Inc. — 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 Atara Biotherapeutics, 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 J. P. Morgan Securities LLC (“**J.P. Morgan**”) 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 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 (collectively, the “**Undersigned’s Shares**”), 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 any security convertible into or exercisable or exchangeable for Common Stock.

Notwithstanding the foregoing, the undersigned may (A) transfer the Undersigned’s Shares:

- (i) as a bona fide gift or gifts,
- (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, or if the undersigned is a trust, to any beneficiary (including such beneficiary’s estate) of the undersigned,
- (iii) by will or under the laws of descent,
- (iv) to affiliates (within the meaning set forth in Rule 405 as promulgated by the SEC under the Securities Act of 1933, as amended, and including subsidiaries of the undersigned if the undersigned is a corporation), limited partners, general partners, limited liability company members or stockholders of the undersigned to the extent that the undersigned is a partnership, limited liability company or corporation,
- (v) in connection with a sale of any of the Undersigned’s Shares acquired in open market transactions after the Public Offering,
- (vi) (a) as forfeitures to the Company to satisfy tax withholding and remittance obligations of the undersigned in connection with the vesting, settlement or exercise of equity awards granted pursuant to an employee benefit plan described in the Registration Statement, or (b) to the Company in connection with the repurchase of shares of Common Stock issued pursuant to an employee benefit plan described in the Registration Statement or pursuant to the agreements pursuant to which such shares were issued as disclosed in the Registration Statement,
- (vii) pursuant to a trading plan established pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), prior to the date hereof, or
- (viii) with the prior written consent of J.P. Morgan on behalf of the Underwriters;

provided, that in the case of (i), (ii), (iii) and (iv) above, it shall be a condition to the transfer that the donee, trustee, legatee, heir, distributee or other transferee, as the case may be, agrees to be bound in writing by the restrictions set forth herein; provided, further, that in the case of (i), (ii), (iii) and (iv) above, (a) such transfers are not required to be reported with the SEC on Form 4 in accordance with Section 16 of the Exchange during the Restricted Period, (b) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers during the Restricted Period, and (c) such transfers shall not involve a disposition for value; provided, further, that

in the case of (v) above, (a) such transfers are not required to be reported with the SEC on Form 4 in accordance with Section 16 of the Exchange during the Restricted Period and (b) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers during the Restricted Period; provided, further, that in the case of (vi) above, that any public reports or filings, including filings under Sections 13 or 16 of the Exchange Act that shall be required to be made or voluntarily made shall clearly indicate in the footnotes thereto that such sale or withholding was solely pursuant to the circumstances described in (vi) above, provided, further, that in the case of (vii) above, that any public reports or filings, including filings under Sections 13 or 16 of the Exchange Act that shall be required to be made or voluntarily made shall clearly indicate in the footnotes that such sale was made pursuant to a trading plan established pursuant to Rule 10b5-1 under the Exchange Act; or

(B) exercise any stock options issued pursuant to the Company's equity incentive plans or warrants (including, in each case, by way of net exercise, but for the avoidance of doubt, excluding all manners of exercise that would involve a sale of any securities relating to such options or warrants, whether to cover the applicable aggregate exercise price, withholding tax obligations or otherwise), which equity incentive plans and stock options or warrants are described in the Registration Statement; provided, that any securities received upon such exercise will also be subject to this Letter Agreement.

For purposes of this Letter Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned now has, and, except as contemplated by clause (A) and (B) above, for the duration of this Letter Agreement will have, good and marketable title to the Undersigned's Shares, free and clear of all liens, encumbrances, and claims whatsoever. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Undersigned's Shares except in compliance with the foregoing restrictions.

Nothing in this Letter Agreement shall preclude the establishment of a new trading plan meeting the requirements of Rule 10b5-1 under the Exchange Act; provided, that (i) no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required during the Restricted Period, (ii) neither the Company nor the undersigned otherwise voluntarily effects any public filing or report regarding the establishment of such plan during the Restricted Period and (iii) no sales are made during the Restricted Period pursuant to that new plan.

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 understands that the Company and the Underwriters are relying upon this Letter Agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this Letter Agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors, and assigns.

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 Company notifies the Representatives, in writing, prior to the execution of the Underwriting Agreement, that it does not intend to proceed with the proposed Public Offering, (ii) if the Underwriting Agreement does not become effective by March 31, 2018 (provided, that the Company may by written notice to the undersigned on or prior to March 31, 2018 extend such date for a period of up to an additional three months), or (iii) 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, 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,

By: _____

Name:

Title:



Carlton Fleming
+1 650 843 5865
cfleming@cooley.com

March 2, 2018

Atara Biotherapeutics, Inc.
611 Gateway Blvd., Suite 900
South San Francisco, CA 94080

Ladies and Gentlemen:

You have requested our opinion, as counsel to Atara Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), with respect to certain matters in connection with the offering by the Company of up to 4,928,571 shares of its common stock, par value \$0.0001 (the “**Shares**”), including up to 642,857 Shares that may be sold pursuant to the exercise of an option to purchase additional Shares, pursuant to a Registration Statement on Form S-3 (Registration Statement No. 333-223262) (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 within the Registration Statement (the “**Base Prospectus**”), and the prospectus supplement, dated February 28, 2018, and filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (the “**Prospectus Supplement**”). The Base Prospectus and the Prospectus Supplement are collectively referred to as the “**Prospectus**.” The Shares are to be sold by the Company as described in the Registration Statement and the Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Company’s Amended and Restated Certificate of Incorporation, the Company’s Amended and Restated Bylaws and the originals or copies certified to our satisfaction of such records, documents, certificates, 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 to independently verify such matters.

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 any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

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 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. This opinion is expressed as of the date hereof, and we disclaim any responsibility to advise you of any changes in the facts stated or assumed herein or any changes in applicable law.

COOLEY LLP 101 CALIFORNIA STREET 5TH FLOOR SAN FRANCISCO, CA 94111-5800
T: (415) 693-2000 F: (415) 693-2222 COOLEY.COM



Atara Biotherapeutics, Inc.
March 2, 2018
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Sincerely,

Cooley LLP

By: /s/ CARLTON FLEMING
CARLTON FLEMING

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