
**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 5, 2019

AEGLEA BIOTHERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-37722
(Commission
File Number)

46-4312787
(IRS Employer
Identification No.)

**901 S. MoPac Expressway
Barton Oaks Plaza One
Suite 250
Austin, TX**
(Address of principal executive offices)

78746
(Zip Code)

(512) 942-2935
(Registrant's telephone number, including area code)

(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 1.01. Entry into a Material Definitive Agreement

On February 5, 2019, Aeglea BioTherapeutics, Inc. (“*Aeglea*”) entered into an underwriting agreement (the “*Underwriting Agreement*”) with J.P. Morgan Securities LLC and Evercore Group L.L.C., as representatives of the several underwriters named therein (the “*Underwriters*”), pursuant to which Aeglea agreed to issue and sell an aggregate of (a) 3,500,000 shares of its common stock (the “*Shares*”), and (b) pre-funded warrants to purchase 4,000,000 shares of its common stock (the “*Pre-Funded Warrants*”) to the Underwriters (the “*Offering*”). The Shares will be sold to the purchasers at the public offering price of \$8.00 per share. The Pre-Funded Warrants will be sold at a public offering price of \$7.9999 per Pre-Funded Warrant, which represents the per share public offering price for the common stock less a \$0.0001 per share exercise price for each such warrant. Pursuant to the Underwriting Agreement, Aeglea has also granted the Underwriters a 30-day option to purchase up to an additional 1,125,000 shares of its common stock. The Underwriting Agreement contains customary representations and warranties, conditions to closing, market standoff provisions, termination provisions and indemnification obligations, including for liabilities under the Securities Act of 1933, as amended. The Offering is being made pursuant to the shelf registration statement on Form S-3 (File No. 333-217573) that was filed by Aeglea with the Securities and Exchange Commission (“*SEC*”) on May 1, 2017 and declared effective by the SEC on May 30, 2017, and a related prospectus supplement.

The Pre-Funded Warrants are exercisable at any time after the date of issuance. A holder of Pre-Funded Warrants may not exercise the warrant if the holder, together with its affiliates, would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise. A holder of Pre-Funded Warrants may increase or decrease this percentage by providing at least 61 days’ prior notice to Aeglea.

Aeglea estimates that net proceeds from the Offering will be approximately \$56.1 million, after deducting underwriting discounts and commissions and estimated Offering expenses, and assuming no exercise of the Underwriters’ option to purchase additional shares. Aeglea intends to use the net proceeds from the Offering, together with its existing cash resources, to advance the clinical development of pegzilarginase through its Phase 3 pivotal and extension trials in Arginase 1 Deficiency and an ongoing combination trial in cancer, and the remainder to fund continued IND-enabling activities of multiple of Aeglea’s pipeline programs, research and development, manufacturing, initial commercialization infrastructure and for working capital and general corporate purposes. Aeglea expects the Offering to close on February 8, 2019, subject to customary closing conditions.

The Underwriting Agreement is filed as Exhibit 1.1 to this report and the foregoing description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit. The form of Pre-Funded Warrant is filed as Exhibit 4.1 to this report and the foregoing description of the terms of the Pre-Funded Warrants is qualified in its entirety by reference to such exhibit. A copy of the opinion of Fenwick & West LLP, relating to the validity of the Shares in connection with the Offering, is filed with this Current Report on Form 8-K as Exhibit 5.1.

Item 2.02. Results of Operations and Financial Condition

On February 5, 2019, Aeglea filed with the SEC a preliminary prospectus supplement (the “*Preliminary Prospectus*”) pursuant to Rule 424(b) under the Securities Act of 1933, as amended, relating to the Offering. In the Preliminary Prospectus, Aeglea disclosed that it expects to report that Aeglea had cash, cash equivalents, and marketable securities of approximately \$74.5 million as of December 31, 2018. This amount reflects Aeglea’s estimates based solely upon information available to it as of the date of this Current Report on Form 8-K, and the amount reported is not a comprehensive statement of its financial results or position as of December 31, 2018. The actual amount that Aeglea reports will be subject to its financial closing procedures and any final adjustments that may be made prior to the time its financial results for the period ended December 31, 2018 are finalized. PricewaterhouseCoopers LLP has not audited, reviewed, compiled, or applied agreed-upon procedures with respect to the preliminary financial data. Accordingly, PricewaterhouseCoopers LLP does not express an opinion or any other form of assurance with respect thereto.

The information in this Item 2.02 shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended. The information contained in this Item 2.02 shall not be incorporated by reference into any registration statement or other document filed by Aeglea with the SEC, whether made before or after the date of this Current Report on Form 8-K, regardless of any general incorporation language in such filing (or any reference to this Current Report on Form 8-K generally), except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
1.1	Underwriting Agreement dated February 5, 2019, as amended
4.1	Form of Pre-Funded Warrant
5.1	Opinion of Fenwick & West LLP
23.1	Consent of Fenwick & West LLP (contained in Exhibit 5.1)

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and other federal securities laws. Any statements contained herein that do not describe historical facts, including, but not limited to, statements regarding the expected net proceeds of the Offering and the anticipated use of proceeds of the Offering, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those discussed in such forward-looking statements. Such risks and uncertainties include, among others, the risks identified in Aeglea's filings with the SEC, including its Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the SEC on November 8, 2018, the prospectus supplement related to the Offering, and subsequent filings with the SEC. Any of these risks and uncertainties could materially and adversely affect Aeglea's results of operations, which would, in turn, have a significant and adverse impact on Aeglea's stock price. Aeglea cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Aeglea undertakes no obligation to update publicly any forward-looking statements to reflect new information, events or circumstances after the date they were made or to reflect the occurrence of unanticipated events.

SIGNATURE

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.

AEGLEA BIOTHERAPEUTICS, INC.

Date: February 6, 2019

By: /s/ Charles N. York II
Charles N. York II
Chief Financial Officer

AEGLEA BIOTHERAPEUTICS, INC.
3,750,000 Shares of Common Stock, par value \$0.0001
Pre-Funded Warrants to Purchase 3,750,000 Shares of Common Stock
Underwriting Agreement

February 5, 2019

J.P. MORGAN SECURITIES LLC
EVERCORE GROUP L.L.C.
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 Evercore Group L.L.C.
55 East 52nd Street
New York, New York 10055

Ladies and Gentlemen:

Aeglea 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 3,750,000 shares (the “Underwritten Shares”) of Common Stock, par value \$0.0001 per share, of the Company (the “Common Stock”), pre-funded warrants to purchase an aggregate of 3,750,000 shares of Common Stock in the form attached hereto as Exhibit A (the “Warrants”) and, at the option of the Underwriters, up to an additional 1,125,000 shares of Common Stock (the “Option Shares”). The Underwritten Shares and the Warrants are herein referred to as the “Underwritten Securities.” The Underwritten Shares and the Option Shares are herein referred to as the “Shares”. The Shares and Warrants are herein referred to as the “Securities.” The shares of Common Stock issuable upon exercise of the Warrants are herein referred to as the “Warrant Shares.” The shares of Common Stock of the Company to be outstanding after giving effect to the sale of the Shares and the exercise of the Warrants are referred to herein as the “Stock”.

The Company hereby confirms its agreement with the several Underwriters concerning the purchase and sale of the Securities, 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. 333-217573), including a prospectus, relating to the Shares, the Warrants, and the Warrant 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 each prospectus included in such registration statement (and any amendments thereto) before effectiveness, any prospectus filed with the Commission pursuant to Rule 424(a) under the Securities Act and the prospectus included in the Registration Statement at the time of its effectiveness that omits Rule 430 Information, and the term "Prospectus" means the prospectus 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 Securities. 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, the "Pricing Disclosure Package"): a Preliminary Prospectus dated February 5, 2019 and each "free-writing prospectus" (as defined pursuant to Rule 405 under the Securities Act) listed on Annex A hereto.

"Applicable Time" means 10:00 P.M., New York City time, on February 5, 2019.

2. Purchase of the Securities.

(a) The Company agrees to issue and sell the Underwritten Securities 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 at a price of \$7.52 per share of Common Stock (the "Share Purchase Price") from the Company the respective number of Underwritten Shares set forth opposite such Underwriter's name in Schedule 1 hereto, and to purchase from the Company the respective number of Warrants set forth opposite such Underwriter's name in Schedule 1 hereto at a price of \$7.52 per Warrant (the "Warrant Purchase Price").

In addition, the Company agrees to issue and sell the Option Shares to the several Underwriters as provided in this Agreement, and the Underwriters, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, shall have the option to purchase, severally and not jointly, from the Company the Option Shares at the Share 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 Securities, and initially to offer the Securities on the terms set forth in the Pricing Disclosure Package. The Company acknowledges and agrees that the Underwriters may offer and sell Securities to or through any affiliate of an Underwriter.

(c) Payment for the Securities 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 Securities, at the offices of Davis Polk & Wardwell LLP, Menlo Park, California at 10:00 A.M. New York City time on February 8, 2019, 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 Securities 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 Securities 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 Securities 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 Securities 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 Warrants shall be delivered to the Representatives in definitive form, registered in such names and in such denominations as the Representatives shall request in writing not later than the Closing Date. The Warrants will be made available for inspection by the Representatives on the business day prior to the Closing Date.

Notwithstanding the foregoing, the Company and the Representatives shall instruct purchasers of the Warrants in the public offering to make payment for the Warrants on the Closing Date to the Company by wire transfer in immediately available funds to the account specified by the Company at a purchase price of \$7.9999 per Warrant, in lieu of payment by the Underwriters for such Warrants, and the Company shall deliver such Warrants to such purchasers on the Closing Date in definitive form against such payment, in lieu of the Company's obligation to deliver such Warrants to the Underwriters; *provided* that the Company shall promptly (but in no event later than the Closing Date) pay \$0.48 per such Warrant to the Underwriters by wire transfer in immediately available funds to the account specified by the Representatives.

In the event that the purchasers of the Warrants in the public offering fail to make payment to the Company for all or part of the Warrants on the Closing Date, the Representatives may elect, by written notice to the Company, to receive shares of Common Stock in lieu of all or a portion of such Warrants to be delivered to the Underwriters under this Agreement.

(d) The Company acknowledges and agrees that the Representatives and the other Underwriters are acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Securities 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 neither the Representatives nor the other Underwriters shall have any responsibility or liability to the Company with respect thereto. Any review by the Representatives and the other 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) The Company meets the requirements for the use of Form S-3 under the Securities Act. The Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, and, excluding exhibits thereto, to you for each of the other Underwriters, have been declared effective by the Commission in such form and meet the requirements of the Securities Act. Other than (i) the Registration Statement, (ii) any Rule 462 Registration Statement, (iii) any Preliminary Prospectus, (iv) the Prospectus contemplated by this Agreement to be filed pursuant to Rule 424(b) under the Securities Act in accordance with Section 4(a) hereof and (v) any Issuer Free Writing Prospectus (as defined below), no other document with respect to the offer and sale of the Securities has heretofore been filed with the Commission. No stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose or pursuant to Section 8A of the Securities Act has been initiated or, to the Company's knowledge, threatened by the Commission.

(b) *Preliminary Prospectus.* No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission, and each Preliminary Prospectus included in the Pricing Disclosure Package, at the time of filing thereof, complied in all material respects with the Securities Act, and no Preliminary Prospectus, at the time of filing thereof, contained any untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in any Preliminary Prospectus, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(c) *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 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.

(d) *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 Securities (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 filed prior to the first use 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 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.

(e) *Registration Statement and Prospectus.* At the respective times the Registration Statement and any amendments thereto became or become effective and at the Closing Date and any Additional Closing Date, the Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and the Prospectus and any amendments or supplements thereto, at the time the Prospectus or any

amendment or supplement thereto was issued and at Closing Date and any Additional Closing Date, conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that the foregoing representations and warranties in this paragraph (e) shall not apply to information contained in or omitted from the Registration Statement or the Prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with information furnished to the Company in writing by such Underwriter through the Representatives expressly for use in such Registration Statement or 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.

(f) *Emerging Growth Company.* From the time of the Company's initial public offering 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").

(g) *Testing-the-Waters Communications.* Since the time of filing of the Registration Statement, the Company (i) has not engaged in any Testing-the-Waters Communication and (ii) has not authorized anyone to engage in Testing-the-Waters Communications. "Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(h) At the time of filing the Registration Statement, any Rule 462 Registration Statement and any post-effective amendments thereto, and at the date hereof, the Company was not, and the Company currently is not, an "ineligible issuer," as defined in Rule 405 under the Securities Act.

(i) *Documents Incorporated by Reference.* The documents incorporated by reference in the Prospectus, when they were filed with the Commission, 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 any material fact required to be stated therein, or 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 Prospectus, when such documents are filed with Commission 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 any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading..

(j) *Financial Statements.* The financial statements, together with the related notes, included or incorporated by reference in the Pricing Disclosure Package, the Prospectus and in the Registration Statement fairly present the financial position and the results of operations and changes in financial position of the Company and its consolidated subsidiaries at the respective dates or for the respective periods therein specified. Such statements and related notes have been prepared in accordance with the generally accepted accounting principles in the United States ("GAAP") applied on a consistent basis throughout the periods involved except as may be set forth in the related notes included or incorporated by reference in the Registration Statement, Pricing Disclosure Package and the Prospectus; and provided that the unaudited interim financial statements, which are subject to normal year-end adjustments, may not contain certain footnotes, as permitted by the applicable rules of the Commission. The financial statements, together with the related notes, included or incorporated by reference in the Registration Statement, the Pricing

Disclosure Package and the Prospectus comply in all material respects with Regulation S-X. No other financial statements or supporting schedules or exhibits are required by Regulation S-X to be described, included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package or the Prospectus. The summary and selected financial data included or incorporated by reference in the Pricing Disclosure Package, the Prospectus and the Registration Statement fairly present in all material respects the information shown therein as at the respective dates and for the respective periods specified and are derived from the consolidated financial statements set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus and other financial information.

(k) *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 Pricing Disclosure Package, (i) 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 action, order or decree of any court or governmental or regulatory authority, otherwise than as set forth or contemplated in the Pricing Disclosure Package; (ii) any change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Registration Statement, the Pricing Disclosure Package and the Prospectus) or long-term debt of the Company or any of its subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the business, properties, assets, general affairs, management, financial position, prospects, 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 Pricing Disclosure Package.

(l) *Organization and Good Standing.* The Company and each of its subsidiaries (as defined in Section 14 herein) have been duly organized and are validly existing as corporations or other legal entities in good standing (or the foreign equivalent thereof) under the laws of their respective jurisdictions of organization. The Company and each of its subsidiaries are duly qualified to do business and are in good standing (to the extent the concept of good standing or a functional equivalent is recognized in such jurisdictions) as foreign corporations or other legal entities in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification and have all power and authority (corporate or other) necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the failure to so qualify or have such power or authority would not reasonably be expected to (i) have, singularly or in the aggregate, a material adverse effect on the condition (financial or otherwise), results of operations or prospects of the Company and its subsidiaries taken as a whole, or (ii) impair in any material respect the ability of the Company to perform its obligations under the Underwriting Agreement and the Warrants or to consummate any transactions contemplated by this Agreement, the Pricing Disclosure Package or the Prospectus (any such effect as described in clauses (i) or (ii), a "Material Adverse Effect"). The subsidiaries listed in Schedule 2 to this Agreement are the only significant subsidiaries of the Company.

(m) *Capitalization.* The Company has an authorized capitalization as set forth in the Company's most recent financial statements incorporated by reference in the Pricing Disclosure Package and the Prospectus; all the issued shares of capital stock of the Company have been duly and validly authorized and issued, are fully paid and non-assessable, have been issued in compliance with federal and state securities laws, and conform to the description thereof

contained or incorporated by reference in the Pricing Disclosure Package and the Prospectus. All of the Company's options, warrants and other rights to purchase or exchange any securities for shares of the Company's capital stock have been duly authorized and validly issued and were issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. As of the date set forth in the Pricing Disclosure Package, there were no authorized or outstanding shares of capital stock, options, warrants, preemptive rights, rights of first refusal or other rights to purchase or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than Common Stock issued pursuant to the exercise of stock options or other awards outstanding under the Company's stock option plans, options or other securities granted or issued pursuant to the Company's existing equity compensation plans or other plans, and the issuance of Common Stock pursuant to employee stock purchase plans. Since such date, the Company has not issued any securities other than Common Stock issued pursuant to the exercise of stock options or other awards outstanding under the Company's stock options plans, options or other securities granted or issued pursuant to the Company's existing equity compensation plans or other plans, and the issuance of Common Stock pursuant to employee stock purchase plans. The description of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, as described in the Pricing Disclosure Package and the Prospectus, accurately and fairly present in all material respects the information required to be shown with respect to such plans, arrangements, options and rights.

(n) *Capitalization of Subsidiaries.* All the outstanding shares of capital stock (if any) of each subsidiary of the Company have been duly authorized and validly issued, are fully paid and nonassessable and, except to the extent set forth in the Pricing Disclosure Package or the Prospectus, are owned by the Company directly or indirectly through one or more wholly-owned subsidiaries, free and clear of any claim, lien, encumbrance, security interest, restriction upon voting or transfer or any other claim of any third party.

(o) *No Conflicts.* The execution, delivery and performance of this Agreement and the Warrants by the Company, the issuance and sale of the Securities and the Warrant Shares by the Company and the consummation of the transactions contemplated hereby and in the Warrants will not (with or without notice or lapse of time or both) (i) conflict with or result in a breach or violation of any of the terms or provisions of, constitute a default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, encumbrance, security interest, claim or charge upon any property or assets of the Company or any subsidiary pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party 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, (ii) result in any violation of the provisions of the charter or by-laws (or analogous governing instruments, as applicable) of the Company or any of its subsidiaries or (iii) result in the violation of any law, statute, rule, regulation, judgment, order or decree of any court or governmental or regulatory agency or body, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their properties or assets except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation or default that would not, individually or in the aggregate, have a Material Adverse Effect. A "Debt Repayment Triggering Event" means any event or condition that gives, or with the giving of notice or lapse of time would give the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company of any of its subsidiaries.

(p) *No Consents Required.* Except for the registration of the Securities under the Securities Act, the Exchange Act and applicable state securities laws, and such consents, approvals, authorizations, orders and registrations or qualifications as may be required by the Financial Industry Regulatory Authority (“FINRA”) and The Nasdaq Global Market (the “Exchange”) in connection with the purchase and distribution of the Securities by the Underwriters and the listing of the Shares and the Warrant Shares on the Exchange, no consent, approval, authorization or order of, or filing, qualification or registration (each an “Authorization”) with, any court, governmental or regulatory agency or body, foreign or domestic, which has not been made, obtained or taken and is not in full force and effect, is required for the execution, delivery and performance of this Agreement and the Warrants by the Company, the issuance and sale of the Securities and the Warrant Shares or the consummation of the transactions contemplated hereby and in the Warrants; and no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, suspension, termination or invalidation of any such Authorization or any other impairment of the rights of the holder or maker of any such Authorization.

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

(r) *The Shares.* (i) The Shares to be issued and sold by the Company to the Underwriters pursuant to this Agreement have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued, fully paid and non-assessable and will conform in all material respects to the descriptions thereof in the Registration Statement, the Pricing Disclosure Package and the Prospectus; (ii) the Warrants have been duly authorized by the Company and, when executed and delivered by the Company in accordance with this Agreement, will constitute valid and legally binding agreements of the Company enforceable against the Company in accordance with their terms, except as enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting creditors’ rights generally or by equitable principles relating to enforceability; (iii) the Warrant Shares to be issued by the Company upon exercise of the Warrants, as provided therein, have been duly and validly authorized and, when issued and delivered upon exercise as provided under the Warrant, will be duly and validly issued, fully paid and non-assessable and will conform in all material respects to the descriptions thereof in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and (iv) the issuance of the Securities and the Warrant Shares is not subject to any preemptive, rights of first refusal or similar rights.

(s) *Legal Proceedings.* Except as set forth in the Pricing Disclosure Package, there is no legal or governmental proceeding to which the Company or any of its subsidiaries is a party or of which any property or assets of the Company or any of its subsidiaries is the subject, including any proceeding before the United States Food and Drug Administration of the U.S. Department of Health and Human Services (“FDA”), European Medicines Agency (“EMA”), Medicines and Health Products Regulatory Agency (“MHRA”) or other comparable federal, state, local or foreign governmental bodies (it being understood that the interaction between the Company and the FDA and such comparable governmental bodies relating to the clinical development and product approval process shall not be deemed proceedings for purposes of this representation), which is required to be described in the Registration Statement, the Pricing Disclosure Package or the Prospectus or a document incorporated by reference therein and is not described therein, or which, singularly or in the aggregate, if determined adversely to the Company or any of its subsidiaries, would reasonably be expected to have a Material Adverse Effect; and to the Company’s knowledge, no such proceedings are threatened or, contemplated by governmental or regulatory authorities or threatened by others. The Company is in compliance

with all applicable federal, state, local and foreign laws, regulations, orders and decrees governing its business as prescribed by the FDA, or any other federal, state or foreign agencies or bodies engaged in the regulation of pharmaceuticals or biohazardous substances or materials, except where noncompliance would not, singly or in the aggregate, have a Material Adverse Effect. All nonclinical studies and clinical trials conducted by or on behalf of the Company to support approval for commercialization of the Company's product candidates have been and/or are being conducted by the Company, or to the Company's knowledge by third parties, in compliance with all applicable federal, state or foreign laws, rules, orders and regulations, except for such failure or failures to be in compliance as would not reasonably be expected to have, singly or in the aggregate, a Material Adverse Effect.

(t) *No Violation or Default.* Neither the Company nor any of its subsidiaries is (i) in violation of its charter or by-laws (or analogous governing instrument, as applicable), (ii) in default in any respect, and no event has occurred which, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it is bound or to which any of its property or assets is subject (including, without limitation, those administered by the FDA, EMA, MHRA or by any other foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA, EMA or MHRA) or (iii) in violation in any respect of any law, ordinance, governmental rule, regulation or court order, decree or judgment to which it or its property or assets may be subject except, in the case of clauses (ii) and (iii) above, for any such violation or default that would not reasonably be expected to, singularly or in the aggregate, have a Material Adverse Effect.

(u) *Independent Auditors.* PricewaterhouseCoopers LLP, who have certified certain financial statements of the Company and its consolidated subsidiaries included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, is an independent registered public accounting firm with respect to the Company and its consolidated subsidiaries within the meaning of Article 2-01 of Regulation S-X and the Public Company Accounting Oversight Board (United States) (the "PCAOB").

(v) *Off-Balance Sheet Transactions.* Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no material off-balance sheet transactions (including, without limitation, transactions related to, and the existence of, "variable interest entities" within the meaning of Financial Accounting Standards Board Accounting Standards Codification Topic 810), arrangements, obligations (including contingent obligations), or any other relationships with unconsolidated entities or other persons, that may reasonably be expected to have a material current or future effect on the Company's financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses.

(w) *Title to Real and Personal Property.* The Company and each of its subsidiaries have good and marketable title in fee simple (in the case of real property), or have valid rights to lease or otherwise use, all items of real or personal property (provided, that for the sake of clarity, rights to Intellectual Property are addressed exclusively in Section 3(x) below) which are material to the business of the Company and its subsidiaries taken as a whole, in each case free and clear of all liens, encumbrances, security interests, claims and defects other than those described in the Pricing Disclosure Package and the Prospectus and those that do not, singularly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries or could not reasonably be expected, singularly or in the aggregate, to have a Material Adverse Effect.

(x) *Intellectual Property.* The Company and its subsidiaries own or possess valid and enforceable rights to use all trademarks, service marks, trade names, Internet domain names, patents, patent applications, copyrights, trade secrets, inventions, software, works of authorship, know-how, databases, formulae, and other intellectual property (including unpatented and/or unpatentable proprietary or confidential information, systems, or procedures) (collectively, "Intellectual Property") necessary to conduct their respective businesses as currently conducted and described in the Pricing Disclosure Package and the Prospectus; provided that the foregoing representation shall not be construed as a representation and warranty of non-infringement of Intellectual Property. The Company and its subsidiaries have not received any written opinion from their legal counsel concluding that any activities of their respective businesses, each as currently conducted, infringe, misappropriate or otherwise violate valid and enforceable Intellectual Property of any third party, and the Company and its subsidiaries have not received written notice of any pending or threatened action, suit, proceeding or claim by any third party challenging the Company's and its subsidiaries' rights in or to any of their respective Intellectual Property owned or used by the Company or its subsidiaries. To the Company's knowledge, the Company and its subsidiaries' respective businesses do not infringe, misappropriate or otherwise violate any Intellectual Property of any third party, and the Company and its subsidiaries have not received written notice of any pending or threatened action, suit, proceeding or claim by any third party alleging that the Company or any of its subsidiaries have infringed, misappropriated or otherwise violated any Intellectual Property of any third party. All licenses for the use of the Intellectual Property by the Company or any of its subsidiaries described in the Pricing Disclosure Package and the Prospectus are valid, binding upon, and enforceable against the Company and its subsidiaries and, to the Company's knowledge, the other parties thereto in accordance to its terms. The Company and its subsidiaries have complied in all material respects with, and are not in breach in any material respect nor have received any written asserted or threatened claim of breach of any Intellectual Property license, and the Company and its subsidiaries have no knowledge of any breach or anticipated breach by any third party with respect to any Intellectual Property license to which the Company or any of its subsidiaries is a party. The Company and its subsidiaries have taken commercially reasonable steps to protect, maintain and safeguard their Intellectual Property sufficient, in the Company's reasonable business judgment, for the conduct of their businesses as currently conducted and described in the Pricing Disclosure Package and the Prospectus, including the execution of appropriate nondisclosure and confidentiality agreements. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any third party in respect of, the Company's and its subsidiaries' right to own, use, or hold for use any of the material Intellectual Property as owned, used or held for use in the conduct of their business as currently conducted. The Company and its subsidiaries have used commercially reasonable efforts to obtain ownership of all works of authorship and inventions made by their employees, consultants and contractors during the time they were employed by or under contract with the Company and its subsidiaries and which are material to their businesses. All founders and key employees have signed confidentiality and invention assignment agreements with the Company or its applicable subsidiary.

(y) *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 (or analogous interest holders), customers or suppliers of the Company or any of its affiliates on the other hand, which is required to be described in the Pricing Disclosure Package and the Prospectus and which is not so described.

(z) *Investment Company Act.* The Company is not nor, after giving effect to the offering of the Securities and the application of the net proceeds thereof as described in the Pricing Disclosure Package and the Prospectus, will it be required to register as an “investment company” or an entity “controlled” by an “investment company” within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

(aa) *Taxes.* The Company and its subsidiaries each (i) have timely filed all necessary federal, state, local and foreign tax returns (or timely filed extensions with respect to such returns), and all such returns were true, complete and correct in all material respects, (ii) have paid all federal, state, local and foreign taxes, for which it is liable, including, without limitation, all sales and use taxes and all taxes which the Company or any of its subsidiaries is obligated to withhold from amounts owing to employees, creditors and third parties (other than such amounts being disputed in good faith and by appropriate proceedings and for which appropriate reserves, if required, have been established), and (iii) do not have any tax deficiency or claims outstanding or assessed or, to its knowledge, proposed against any of them, except those, in each of the cases described in clauses (i), (ii) and (iii) above, that would not, singularly or in the aggregate, have a Material Adverse Effect.

(bb) *Licenses and Permits.* The Company and each of its subsidiaries possess all licenses, certificates, authorizations and permits issued by, and have made all declarations and filings with, the appropriate local, state, federal or foreign governmental or regulatory agencies or bodies (including, without limitation, those administered by the FDA, EMA, MHRA or by any other foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA, EMA or MHRA) that are necessary to conduct of their respective businesses as described in the Pricing Disclosure Package and the Prospectus (collectively, the “Governmental Permits”) except where any failures to possess or make the same would not, singularly or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company and its subsidiaries are in compliance with all such Governmental Permits; all such Governmental Permits are valid and in full force and effect, except where the validity or failure to be in full force and effect would not, individually or in the aggregate, have a Material Adverse Effect. Neither the Company nor any subsidiary has received notification of any revocation, adverse modification, suspension, termination or invalidation (or proceedings related thereto) of any such Governmental Permit and the Company has no reason to believe that any such Governmental Permit will not be renewed.

(cc) *Regulatory Matters; Clinical Trials.* The nonclinical studies and clinical trials conducted by or on behalf of the Company that are described in the Pricing Disclosure Package and the Prospectus (the “Company Studies”) were and, if still pending, are being, conducted in all material respects in accordance with their experimental protocols; the descriptions of the results of the Company Studies contained in the Pricing Disclosure Package and Prospectus are accurate in all material respects; the Company has no knowledge of any other nonclinical studies or clinical trials not described in the Pricing Disclosure Package and the Prospectus, the results of which are inconsistent with or otherwise call into question the results described or referred to in the Pricing Disclosure Package and the Prospectus; and the Company has not received any written notices or correspondence with the FDA, EMA, MHRA or any other foreign, state or local governmental body exercising comparable authority requiring the termination, suspension or material modification of any Company Studies that termination, suspension or material

modification would reasonably be expected to have a Material Adverse Effect and, to the Company's knowledge, there are no reasonable grounds for the same. To the Company's knowledge, none of the Company Studies involved any investigator who has been disqualified as a clinical investigator or has been found by the FDA, EMA or MHRA to have engaged in scientific misconduct.

(dd) *Regulatory Matters: Manufacturing.* To the Company's knowledge, the manufacturing facilities and operations of its suppliers are operated in compliance in all material respects with all applicable statutes, rules, regulations and policies of the FDA and comparable regulatory agencies outside of the United States (including the EMA and MHRA) to which the Company is subject.

(ee) *No Labor Dispute.* There is (A) no significant unfair labor practice complaint pending against the Company, or any of its subsidiaries, nor to the Company's knowledge, threatened against it or any of its subsidiaries, before the National Labor Relations Board, any state or local labor relation board or any foreign labor relations board, and no significant grievance or significant arbitration proceeding arising out of or under any collective bargaining agreement is so pending against the Company or any of its subsidiaries, or, to the Company's knowledge, threatened against it and (B) no labor disturbance by or dispute with, the employees of the Company or any of its subsidiaries exists or, to the Company's knowledge, is contemplated or threatened, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries' principal suppliers, manufacturers, customers or contractors, that could reasonably be expected, singularly or in the aggregate, to have a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company or any subsidiary plans to terminate employment with the Company or any such subsidiary.

(ff) *Compliance with ERISA.* No "prohibited transaction" (as defined in Section 406 of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"), or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the "Code")) or "accumulated funding deficiency" (as defined in Section 302 of ERISA) or any of the events set forth in Section 4043(b) of ERISA (other than events with respect to which the thirty (30)-day notice requirement under Section 4043 of ERISA has been waived) has occurred or would reasonably be expected to occur with respect to any "employee benefit plan" (as defined under ERISA) of the Company or any of its subsidiaries which would, singularly or in the aggregate, reasonably be expected to have a Material Adverse Effect. Each employee benefit plan of the Company or any of its subsidiaries is in compliance in all material respects with applicable law, including ERISA and the Code. The Company and its subsidiaries have not incurred and would not reasonably be expected to incur material liability under Title IV of ERISA with respect to the termination of, or withdrawal from, any pension plan (as defined in ERISA). Each pension plan for which the Company or any of its subsidiaries would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified, and to the Company's knowledge, nothing has occurred, whether by action or by failure to act, which would, singularly or in the aggregate, reasonably be expected to cause the loss of such qualification.

(gg) *Environmental Laws and Hazardous Materials.* The Company and its subsidiaries are in compliance in all material respects with all foreign, federal, state and local rules, laws and regulations relating to the use, treatment, storage and disposal of hazardous or toxic substances or waste and protection of health and safety or the environment which are applicable to their businesses as described in the Registration Statement, the Pricing Disclosure

Package and the Prospectus (“Environmental Laws”). There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other hazardous wastes by, due to, or caused by the Company or any of its subsidiaries (or, to the Company’s knowledge, any other entity for whose acts or omissions the Company or any of its subsidiaries is or may otherwise be liable) upon any of the property now or previously owned or leased by the Company or any of its subsidiaries, or upon any other property, in violation of any applicable law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any applicable law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability that would reasonably be expected to have a Material Adverse Effect; and to the Company’s knowledge, there has been no disposal, discharge, emission or other release of any kind onto such property or into the environment surrounding such property of any toxic or other hazardous wastes with respect to which the Company or any of its subsidiaries has knowledge and which would have a Material Adverse Effect.

(hh) *Accounting Controls*. The Company and each of its subsidiaries maintains a system of “internal control over financial reporting” (as such term is defined in Rule 13a-15(f) under the Exchange Act) that is designed to comply in all material respects with any applicable requirements of the Exchange Act and has been designed by their respective principal executive and principal financial officers, or under their supervision, to provide reasonable assurances that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the Commission’s rules and guidelines applicable thereto. Except as described in the Pricing Disclosure Package, since the end of the Company’s most recent audited fiscal year, there has been (1) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (2) no change in the Company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

(ii) *Disclosure Controls*. The Company and its subsidiaries maintain disclosure controls and procedures (as such 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 reasonably designed to ensure that information required to be disclosed by the Company and its subsidiaries in reports that they file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management to allow timely decisions regarding disclosure. The Company and its subsidiaries have conducted evaluations of the effectiveness of their disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

(jj) *eXtensible Business Reporting Language*. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(kk) *Insurance.* The Company and each of its subsidiaries carry, or are covered by, insurance in such amounts and covering such risks as the Company reasonably believes is adequate for the conduct of their respective businesses as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and the value of their respective properties and is customary for companies engaged in similar businesses in similar industries. Neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received written notice from any insurer, agent of such insurer or the broker of the Company or any of its subsidiaries that any material capital improvements or any other material expenditures (other than premium payments) are required or necessary to be made in order to continue such insurance.

(ll) *Cybersecurity; Data Protection.* The Company's and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, and, to the Company's knowledge, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data ("Personal Data")) used in connection with their businesses, and, to the Company's knowledge, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. To the Company's knowledge, no claims have been asserted or threatened against the Company or its subsidiaries alleging a violation relating to Personal Data or data rights and the consummation of the transactions contemplated hereby will not breach or otherwise cause any violation of any law related to privacy, data protection, or the collection and use of Personal Data collected, used, or held for use by the Company or its subsidiaries in the conduct of their businesses, except where any such breach or violation would not reasonably be expected to result in a Material Adverse Effect. The Company and its subsidiaries are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the collection and use of Personal Data, privacy and security of IT Systems and Personal Data and the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification.

(mm) *No Unlawful Payments.* Neither the Company nor any of its subsidiaries nor any director or officer of the Company or any of its subsidiaries, nor, to the knowledge of the Company, any agent, employee, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries, has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment of corporate funds or benefit to any foreign or domestic government or regulatory official or employee, including, without limitation, 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 U.S. 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 offense 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.

(nn) *Compliance with Anti-Money Laundering Laws.* The operations of the Company and its 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 or regulatory 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.

(oo) *No Conflicts with Sanctions Laws.* Neither the Company nor any of its subsidiaries, nor any director or officer of the Company or its subsidiaries, nor to the Company’s knowledge, any agent, employee or representative of the Company or its subsidiaries, 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, Crimea, Cuba, Iran, North Korea and Syria (each, a “Sanctioned Country”); and the Company will not directly or indirectly use the proceeds of the offering of the Securities 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. Since inception, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

(pp) *No Restrictions on Subsidiaries.* Except as described in the Pricing Disclosure Package and the Prospectus, no subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such subsidiary’s capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary’s properties or assets to the Company or any other subsidiary of the Company.

(qq) *No Broker's Fees.* The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against the Company or the Underwriters for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Securities or any transaction contemplated by this Agreement, the Registration Statement, the Pricing Disclosure Package or the Prospectus.

(rr) *No Registration Rights.* There are no persons with registration rights or similar rights to have any securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, other than those disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus and have been waived.

(ss) *No Stabilization.* Neither the Company nor, to the Company's knowledge, any of its officers, directors or affiliates has taken or will take, directly or indirectly, any action designed or intended to stabilize or manipulate the price of any security of the Company, or which caused or resulted in, or which might in the future reasonably be expected to cause or result in, stabilization or manipulation of the price of any security of the Company.

(tt) *Forward-Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) included or incorporated by reference in either the Pricing Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(uu) *Statistical and Market Data.* The statistical and market-related data included in the Registration Statement, the Pricing Disclosure Package and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate, and such data agree with the sources from which they are derived.

(vv) *Listing.* The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act and is listed on the Exchange, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Exchange, nor has the Company received any notification that the Commission or FINRA is contemplating terminating such registration or listing.

(ww) *Sarbanes-Oxley Act.* There is and has been no failure on the part of the Company or any of the Company's officers or directors, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act") in any material respect, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(xx) *No Associated Persons; FINRA Matters.* Neither the Company nor, to the Company's knowledge, any of its affiliates (within the meaning of FINRA Rule 5121(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA.

(yy) *No Integration*. Except as described in the Pricing Disclosure Package, the Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A, or Regulation D or S under the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(zz) *No Ratings*. There are no securities or preferred stock of or guaranteed by the Company or any of its subsidiaries that are rated by a “nationally recognized statistical rating organization”, as such term is defined in Section 3(a)(62) under the Exchange Act.

(aaa) *Minute Books*. The minute books of the Company and each of its subsidiaries have been made available to the Underwriters and counsel for the Underwriters, and such books (i) contain a complete summary, in all material respects, of all meetings and actions of the board of directors (including each board committee) and stockholders of the Company (or analogous governing bodies and interest holders, as applicable), and each of its subsidiaries since the time of its respective incorporation or organization through the date of the latest meeting and action, and (ii) accurately in all material respects reflect all transactions referred to in such minutes.

Any certificate signed by or on behalf of the Company and delivered to the Representatives or to counsel for the Underwriters shall be deemed to be a representation and warranty by the Company (and not by any such officer of the Company in his or her personal capacity) to each Underwriter as to the matters covered thereby.

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 Securities; 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*. Upon written request of either of the Representatives, the Company will deliver, without charge, (i) to the Representatives, two signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith and documents incorporated by reference therein; and (ii) to each Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and documents incorporated by reference therein 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 Securities as in the opinion of counsel for the Underwriters a prospectus relating to the Securities 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 Securities 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, the Pricing Disclosure Package or the Prospectus, whether before or after the time that the Registration Statement becomes effective, the Company will furnish to the Representatives and counsel for the Underwriters a copy of the proposed Issuer Free Writing Prospectus, amendment or supplement for review and will not make, prepare, use, authorize, approve, refer to or file any such Issuer Free Writing Prospectus or file any such proposed amendment or supplement to which the Representatives reasonably object.

(d) *Notice to the Representatives.* The Company will advise the Representatives promptly, and confirm such advice in writing, (i) when any amendment to the Registration Statement has been filed or becomes effective; (ii) when any supplement to the Pricing Disclosure Package, 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; (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information 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; (v) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, any of the Pricing Disclosure Package, 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; and (vi) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Securities 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 Securities and, if any such order is issued, will use reasonable best efforts to 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 promptly 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 or any Additional 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 promptly 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.* If required by applicable law, the Company will qualify the Securities 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 Securities; provided that the Company shall not be required to (i) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (ii) file any general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject.

(g) *Earning Statement.* The Company will make generally available to its security holders and the Representatives as soon as practicable an earning statement that satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement. Any report, communication or financial statement furnished or filed with the Commission that is publicly available on the Commission’s Electronic Data Gathering, Analysis and Retrieval system (“EDGAR”) shall be deemed to have been furnished to such security holders at the time furnished or filed with the Commission.

(h) *Clear Market.* For a period of 90 days after the date of the Prospectus, the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or file with, or submit to, the Commission a registration statement under the Securities Act relating to, any shares of Stock or any securities convertible into or exercisable or exchangeable for Stock, or publicly disclose the intention to make any offer, sale, pledge, disposition, submission or filing, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise, without the prior written consent of the Representatives, other than the Securities to be sold hereunder and

the delivery of Warrant Shares upon exercise of the Warrants; provided, however, that the Company may (i) issue Stock and options to purchase Stock, shares of Stock underlying options granted and other securities, each pursuant to any director or employee stock option plan, stock ownership plan or dividend reinvestment plan of the Company in effect on the date hereof and described in the Pricing Disclosure Package; (ii) issue Stock pursuant to the conversion or the exercise of securities that are outstanding on the date hereof and described in the Pricing Disclosure Package; (iii) enter into agreements providing for the issuance by the Company of shares of Stock or any security convertible into or exercisable for shares of Stock in connection with the acquisition by the Company or any of its subsidiaries of the securities, business, property or other assets of another person or entity pursuant to an employee benefit plan assumed by the Company in connection with such acquisition, and issue any such securities pursuant to any such agreement; (iv) enter into agreements providing for the issuance of shares of Stock or any security convertible into or exercisable for shares of Stock in connection with joint ventures, commercial relationships or other strategic transactions, and issue any such securities pursuant to any such agreements; provided that in the case of clauses (iii) and (iv), the aggregate number of shares of Stock (assuming full conversion or exercise of any securities convertible into or exercisable for Stock) that the Company may sell or issue or agree to sell or issue pursuant to clauses (iii) and (iv), taken together, shall not exceed 5.0% of the total number of shares of Stock issued and outstanding immediately subsequent to the completion of the transactions contemplated by this Agreement; provided further that in the case of clauses (iii) and (iv), it shall be a condition to the sale, issuance or transfer of shares of any such securities that the transferee executes and delivers to the Representatives, acting on behalf of the Underwriters, not later than one business day prior to such transfer, a written agreement, in substantially the form of Exhibit B to this Agreement, and otherwise satisfactory in form and substance to the Representatives; (v) adopt a new equity incentive plan, file a registration statement on Form S-8 under the Securities Act to register the offer and sale of securities to be issued pursuant to such new equity incentive plan, and issue securities pursuant to such new equity incentive plan or any other employee benefit or equity incentive plan of the Company described in the Pricing Disclosure Package as of the date hereof (including, without limitation, the issuance of shares of Stock upon the exercise of options or other securities issued pursuant to such equity incentive plans), provided that such new equity incentive plan satisfies the transaction requirements of General Instruction A.1 of Form S-8 under the Securities Act and (vi) file amendments to, and request effectiveness of, the registration statement on Form S-3 (Registration No. 333-228967) previously filed with the Commission on December 21, 2018, provided that no such amendments or request for effectiveness may be filed or made prior to the Closing Date. In addition, the Company will cause each executive officer or director of the Company to furnish to the Representatives, prior to the Closing Date, a letter, substantially in the form of Exhibit B hereto.

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

(j) *No Stabilization.* Neither the Company nor its subsidiaries or affiliates will take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Stock.

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

(l) *Reports*. So long as the Shares or the Warrants 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 or the Warrants, 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 EDGAR or any successor 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) *Shelf Renewal*. If immediately prior to the third anniversary (the "Renewal Deadline") of the initial effective date of the Registration Statement, any of the Securities remain unsold by the Underwriters, the Company will, prior to the Renewal Deadline, file, if it has not already done so and is eligible to do so, a new automatic shelf registration statement relating to the Securities, in a form satisfactory to the Representatives. If the Company is not eligible to file an automatic shelf registration statement, the Company will, prior to the Renewal Deadline, if it has not already done so, file a new shelf registration statement relating to the Securities, in a form satisfactory to the Representatives, and will use its reasonable efforts to cause such registration statement to be declared effective within 180 days after the Renewal Deadline. The Company will take all other action reasonably necessary or appropriate to permit the issuance and sale of the Securities to continue as contemplated in the expired registration statement relating to the Securities. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be.

(o) *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 Securities within the meaning of the Securities Act and (ii) completion of the 90-day restricted period referred to in Section 4(h) hereof.

5. Certain Agreements of the Underwriters. Each Underwriter 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 Securities unless such terms have previously been included in a free writing prospectus filed with the Commission; *provided* that Underwriters may use a term sheet substantially in the form of Annex B hereto without the consent of the Company; *provided further* that any Underwriter using such term sheet shall notify the Company, and provide a copy of such term sheet to the Company, prior to, or substantially concurrently with, the first use of such term sheet.

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

6. Conditions of Underwriters' Obligations. The obligation of each Underwriter to purchase the Underwritten Securities 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, to the Company's knowledge, 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; the Rule 462 Registration Statement, if any, each Issuer Free Writing Prospectus and the Prospectus shall have been filed with the Commission within the applicable time period prescribed for such filing by, and in compliance with, the Securities Act and in accordance with Section 4(a), and the Rule 462 Registration Statement, if any, shall have become effective immediately upon its filing with the Commission; and FINRA shall have raised no unresolved objection to the fairness and reasonableness of the terms of this Agreement or the transactions contemplated hereby.

(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 Material Adverse Change.* Since the date of the latest audited financial statements included or incorporated by reference in the Pricing Disclosure Package, (i) neither the Company nor any of its subsidiaries shall have sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth in the Pricing Disclosure Package, (ii) neither the Company nor any of its subsidiaries shall have entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole; (iii) there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries, taken as a whole, or any change, or any development involving a prospective change, in or affecting the business, general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, otherwise than as set forth in the Pricing Disclosure Package, the effect of which, in any such case described in clause (i), (ii) or (iii) of this paragraph (c), is, in the reasonable judgment of the Representatives, so material and adverse as to make it impracticable or inadvisable to proceed with the sale or delivery of the Securities on the terms and in the manner contemplated in the Pricing Disclosure Package.

(d) *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 reasonably satisfactory to the Representatives, in their capacities as officers of the Company on behalf of the Company and not in their individual capacities, confirming that (i) no stop order suspending the effectiveness of the Registration Statement (including, for avoidance of doubt, any Rule 462 Registration Statement), or any post-effective amendment thereto, shall be in effect and no proceedings for such purpose shall have been instituted or, to their knowledge, threatened by the Commission, (ii) for the period from and including the date of this Agreement through and including such Closing Date or Additional Closing Date, as the case may be, there has not occurred any Material Adverse Effect, (iii) to their knowledge, after reasonable investigation, as of the Closing Date or Additional Closing Date, as the case may be, the representations and warranties of the Company in this Agreement are true and correct and 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 Additional Closing Date, as the case may be, (iv) there has not been, subsequent to the date of the most recent audited financial statements included in the Pricing Disclosure Package, any Material Adverse Effect in the financial position or results of operations of the Company, or any change or development that, singularly or in the aggregate, would reasonably be expected to involve a Material Adverse Effect, except as set forth in the Pricing Disclosure Package and the Prospectus and (v) trading of any securities issued or guaranteed by the Company shall have not been suspended on any exchange or in any over-the-counter market.

(e) *Chief Financial Officer Certificate.* The Representatives shall have received on the date hereof and on the Closing Date or the Additional Closing Date, as the case may be, a certificate of the chief financial officer of the Company, in his capacity as an officer of the Company on behalf of the Company and not in his individual capacity, in the form agreed with the Representatives.

(f) *Comfort Letters.* On the date of this Agreement and on the Closing Date or the Additional Closing Date, as the case may be, PricewaterhouseCoopers LLP shall have furnished to the Representatives, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained or incorporated by reference in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus; provided, that the letter delivered on the Closing Date or the Additional Closing Date, as the case may be, shall use a "cut-off" date no more than two 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.* Fenwick & West LLP, counsel for the Company, shall have furnished to the Representatives, at the request of the Company, their written opinion and 10b-5 statement, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(h) *Opinion and 10b-5 Statement of Intellectual Property Counsel for the Company.* Drinker Biddle & Reath LLP, intellectual property counsel for the Company, shall have furnished to the Representatives, at the request of the Company, their written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(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 and Sale.* 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 Securities; 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 Securities.

(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 Warrant Shares and the Shares to be delivered on the Closing Date or the Additional Closing Date, as the case may be, shall have been approved for listing on the Exchange, subject 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 officers and directors of the Company relating to sales and certain other dispositions of shares of Stock or certain other securities, delivered to you on or before the date hereof, shall be full force and effect on the Closing Date or the 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, reasonable legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such reasonable 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 Preliminary Prospectus, 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 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 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 Preliminary Prospectus, 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 figure appearing in the third paragraph under the caption “Underwriting” and the information contained in the twelfth, thirteenth, fourteenth and fifteenth paragraphs 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) of this Section 7 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 paragraphs (a) or (b) of this Section 7 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 paragraphs (a) or (b) of this Section 7. 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 reasonable fees and expenses in such proceeding and shall pay the reasonable 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) counsel to the Indemnified Person has advised 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 reasonable fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such reasonable 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 J.P. Morgan Securities LLC and any such separate firm for the Company, its directors, its officers who signed the Registration Statement and any control persons of the Company shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested that an Indemnifying Person reimburse the Indemnified Person for reasonable 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 45 days after receipt by the Indemnifying Person of such request; (ii) the Indemnifying Person shall have received notice of the terms of such settlement at least thirty (30) days prior to such settlement being entered into; and (iii) 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 would have been a party and indemnification would 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) or (b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters on the other, from the offering of the Securities 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 but after deducting underwriting discounts and commissions) received by the Company from the sale of the Securities 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 Securities. 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 reasonably 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 Securities exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to paragraphs (d) and (e) are several in proportion to their respective purchase obligations hereunder and not joint.

(f) *Non-Exclusive Remedies.* The remedies *provided* for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

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

9. Termination. This Agreement may be terminated in the absolute discretion of the Representatives, by notice to the Company, if after the execution and delivery of this Agreement and on or prior to the Closing Date or, in the case of the Option Shares, prior to the Additional Closing Date (i) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange or The Nasdaq Stock Market; (ii) trading of 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 reasonable judgment of the Representatives, is material and adverse and makes it impracticable or

inadvisable to proceed with the offering, sale or delivery of the Securities 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. In the event this Agreement is terminated by the Representatives, the Representatives shall contemporaneously terminate or waive in their entirety the lock-up agreements referred to in Section 6(m).

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 Securities that it has agreed to purchase hereunder on such date, the non-defaulting Underwriters may in their discretion arrange for the purchase of such Securities 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 Securities, 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 Securities on such terms. If other persons become obligated or agree to purchase the Securities of a defaulting Underwriter, either the non-defaulting Underwriters or the Company may postpone the Closing Date or the Additional Closing Date, as the case may be, for up to five full business days in order to effect any changes that in the opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement and the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement and the Prospectus that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context otherwise requires, any person not listed in Schedule 1 hereto that, pursuant to this Section 10, purchases Securities that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any *arrangements* for the purchase of the Securities of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Securities 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 Securities to be purchased on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Securities that such Underwriter agreed to purchase hereunder on such date plus such Underwriter's pro rata share (based on the number of Securities that such Underwriter agreed to purchase on such date) of the Securities 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 Securities of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Securities 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 Securities 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 Securities on the Additional Closing Date, as the case may be, 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 Securities 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 costs of reproducing and distributing each of the Warrants; (iv) the fees and expenses of the Company's counsel and independent accountants; (v) the reasonable fees and expenses incurred in connection with the registration or qualification and determination of eligibility for investment of the Securities under the laws of such jurisdictions as the Representatives may designate and the preparation, printing and distribution of a Blue Sky Memorandum (including the reasonable related fees and expenses of counsel for the Underwriters); (vi) the cost of preparing stock certificates; (vii) the costs and charges of any transfer agent and any registrar; (viii) reasonable expenses and application fees incurred in connection with any filing with, and clearance of the offering by, FINRA, provided that the related fees and expenses of counsel for the Underwriters shall not exceed \$20,000; (ix) all expenses incurred by the Company in connection with any "road show" presentation to potential investors (it being understood that the Underwriters shall pay all of their own costs and expenses, including fees of their counsel, travel and lodging expenses of their employees, agents and representatives); and (x) all expenses and application fees related to the listing of the Shares on the Exchange.

(b) Notwithstanding anything to the contrary in this Agreement, if (i) this Agreement shall have been terminated *pursuant* to Section 9 or 10, (ii) the Company shall fail to tender the Securities for delivery to the Underwriters for any reason not permitted under this Agreement, (iii) the Underwriters shall decline to purchase the Securities for any reason permitted under this Agreement or (iv) the sale of the Securities is not consummated because any condition to the obligations of the Underwriters set forth herein is not satisfied or because of the refusal, inability or failure on the part of the Company to perform any agreement herein or to satisfy any condition or to comply with the provisions hereof, then (A) prior to the Closing Date, in addition to the payment of amounts in accordance with Section 11(a), the Company shall reimburse the Underwriters for the reasonable and documented fees and out of pocket expenses of Underwriters' counsel and for such other out-of-pocket expenses as shall have been reasonably incurred by them in connection with this Agreement and the proposed purchase of the Securities, including, without limitation, documented travel and lodging expenses of the Underwriters, and upon demand the Company shall pay the full amount thereof to the Representatives; and (B) after the Closing Date but prior to any Additional Closing Date with respect to the purchase of any Optional Shares pursuant to a notice delivered by the Underwriters to the Company as provided in this Agreement, the Company shall reimburse the Underwriters for the reasonable and documented fees and expenses of Underwriters' counsel and for such other out-of-pocket expenses as shall have been reasonably and actually incurred by them following the Closing Date pursuant to this Agreement in connection with the proposed purchase of such Optional Shares, and upon demand the Company shall pay the full amount thereof to the Underwriters; *provided* that if this Agreement is terminated pursuant to Section 10 by reason of the default of one or more Underwriters, the Company shall not be obligated to reimburse any defaulting Underwriter on account of expenses to the extent incurred by such defaulting Underwriter; *provided further* that the foregoing shall not limit any reimbursement obligation of the Company to any non-defaulting Underwriter under this Section 11(b).

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 Securities 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 Securities 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 or the directors, officers, controlling persons or affiliates referred to in Section 7 hereof.

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 “subsidiary” 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; and c/o Evercore Group L.L.C., 55 East 52nd Street, New York, New York 10055, Attention: Kenneth A. Masotti. Notices to the Company shall be given to it at Aeglea BioTherapeutics, Inc. Attention: Charles N. York, email cyork@aegleabio.com.

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

(d) *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.

(e) *Recognition of the U.S. Special Resolution Regimes.*

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

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

As used in this Section 16(e):

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

“Covered Entity” means any of the following:

(i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

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

(iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

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

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

(f) *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.

(g) *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.

(h) *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,

AEGLEA BIOTHERAPEUTICS, INC.

By: /s/ Charles N. York II
Name: Charles N. York II
Title: CFO

Accepted: As of the date first written above

J.P. MORGAN SECURITIES LLC
EVERCORE GROUP L.L.C.

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

J.P. MORGAN SECURITIES LLC

By: /s/ Ben Burdett
Name: Ben Burdett
Title: Managing Director

EVERCORE GROUP L.L.C.

By: /s/ Jeff Rosichan
Name: Jeff Rosichan
Title: Senior Managing Director
Equity Capital Markets

Underwriter	Number of Underwritten Shares	Number of Warrants
J.P. Morgan Securities LLC	2,250,000	2,250,000
Evercore Group L.L.C.	1,125,000	1,125,000
H.C. Wainwright & Co., LLC	375,000	375,000
Total	<u>3,750,000</u>	<u>3,750,000</u>

Significant Subsidiaries

AECase, Inc.
AEMase, Inc.
AERase, Inc.

a. **Pricing Disclosure Package**

None

b. **Pricing Information Provided Orally by Underwriters**

Price per Share: \$8.00

Number of Shares: 3,750,000

Price per Warrant: \$7.9999

Number of Warrants: 3,750,000

AEGLEA BIOTHERAPEUTICS, INC.

None

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FORM OF WARRANT

AEGLEA BIOTHERAPEUTICS, INC.

FORM OF WARRANT TO PURCHASE COMMON STOCK

Number of Shares: []
 (subject to adjustment)

Warrant No. []

Original Issue Date: [], 2019

Aeglea BioTherapeutics, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [] or its registered assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of [] shares of common stock, \$0.0001 par value per share (the “**Common Stock**”), of the Company (each such share, a “**Warrant Share**” and all such shares, the “**Warrant Shares**”) at an exercise price per share equal to \$0.0001 per share (as adjusted from time to time as provided in Section 9 herein, the “**Exercise Price**”) upon surrender of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”) at any time and from time to time on or after the date hereof (the “**Original Issue Date**”), subject to the following terms and conditions:

1. *Definitions.* For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**Affiliate**” means any Person directly or indirectly controlled by, controlling or under common control with, a Holder, as such terms are used in and construed under Rule 405 under the Securities Act, but only for so long as such control shall continue.

(b) “**Commission**” means the United States Securities and Exchange Commission.

(c) “**Closing Sale Price**” means, for any security as of any date, the last trade price for such security on the Principal Trading Market for such security, as reported by Bloomberg L.P., or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the last trade price, then the last trade price of such security prior to 4:00 P.M., New York City time, as reported by Bloomberg L.P., or if the security is not listed for trading on a national securities exchange or other trading market on the relevant date, the last quoted bid price for the security in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors’ determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) “**Principal Trading Market**” means the national securities exchange or other trading market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Original Issue Date, shall be the Nasdaq Global Market.

(e) “**Registration Statement**” means the Company’s Registration Statement on Form S-3 (File No. 333-217573), declared effective on May 30, 2017.

(f) “**Securities Act**” means the Securities Act of 1933, as amended.

(g) “**Trading Day**” means any weekday on which the Principal Trading Market is open for trading. If the Common Stock is not listed or admitted for trading, “**Trading Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in New York City are authorized or required by law or other governmental action to close.

(h) “**Transfer Agent**” means American Stock Transfer and Trust Company, LLC, the Company’s transfer agent and registrar for the Common Stock, and any successor appointed in such capacity.

2. *Issuance of Securities; Registration of Warrants.* The Warrant, as initially issued by the Company, is offered and sold pursuant to the Registration Statement. As of the Original Issue Date, the Warrant Shares are issuable under the Registration Statement. Accordingly, the Warrant and, assuming issuance pursuant to the Registration Statement or an exchange meeting the requirements of Section 3(a)(9) of the Exchange Act as in effect on the Original Issue Date, the Warrant Shares, are not “restricted securities” under Rule 144 promulgated under the Securities Act. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the “**Warrant Register**”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. *Registration of Transfers.* Subject to compliance with all applicable securities laws, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment for all applicable transfer taxes (if any). Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “**New Warrant**”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. *Exercise and Duration of Warrants.*

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a “cashless exercise” if so indicated in the Exercise Notice pursuant to Section 10 below). The date on which such exercise notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

5. *Delivery of Warrant Shares.*

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three (3) Trading Days after the Exercise Date), upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with The Depository Trust Company (“**DTC**”) through its Deposit Withdrawal Agent Commission system, or if the Transfer Agent is not participating in the Fast Automated Securities Transfer Program (the “**FAST Program**”) or if the certificates are required to bear a legend regarding restriction on transferability, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. The Holder, or any natural person or legal entity (each, a “**Person**”) so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be.

(b) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. *Charges, Taxes and Expenses.* Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense (excluding any applicable stamp duties) in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; *provided, however*, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. *Replacement of Warrant.* If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. *Reservation of Warrant Shares.* The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed. The Company further covenants that it will not, without the prior written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding.

9. *Certain Adjustments.* The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date or as amended, as described in the Registration Statement, that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock, (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Exercise Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of

Common Stock outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Exercise Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Exercise Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) **Pro Rata Distributions.** If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph) or (iii) rights or warrants to subscribe for or purchase any security, or (iv) cash or any other asset (in each case, a “**Distribution**”), other than a reclassification as to which Section 9(c) applies, then in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the ownership limitation set forth in Section 11(a) hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the ownership limitation set forth in Section 11(a) hereof, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until the earlier of (i) such time, if ever, as the delivery to such Holder of such portion would not result in the Holder exceeding the ownership limitation set forth in Section 11(a) hereof and (ii) such time as the Holder has exercised this Warrant.

(c) **Fundamental Transactions.** If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity and in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one transaction or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a “**Fundamental Transaction**”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “**Alternate Consideration**”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless (i) the Alternate Consideration is solely cash and the Company provides for the simultaneous “cashless exercise” of this Warrant pursuant to Section 10 below or (ii) prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (c) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

(d) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to Section 9 (including any adjustment to the Exercise Price that would have been effected but for the final sentence in this paragraph (d)), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Common Stock then in effect.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest one-hundredth of one cent or the nearest share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least ten (10) days prior to the date such Fundamental Transaction is consummated. Holder agrees to maintain any information disclosed pursuant to this Section 9(g) in confidence until such information is publicly available, and shall comply with applicable law with respect to trading in the Company's securities following receipt any such information.

10. *Payment of Cashless Exercise Price*. Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a "cashless exercise," in which event the Company shall issue to the Holder the number of Warrant Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act as determined as follows:

$$X = Y [(A-B)/A]$$

where:

"X" equals the number of Warrant Shares to be issued to the Holder;

"Y" equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

"A" equals the Closing Sale Price per share of Common Stock as of the Trading Day on the date immediately preceding the Exercise Date; and

"B" equals the Exercise Price per Warrant Share then in effect on the Exercise Date.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “cashless exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the Commission continues to take the position that such treatment is proper at the time of such exercise). In the event that the Registration Statement or another registration statement registering the issuance of Warrant shares is, for any reason, not effective at the time of exercise of this Warrant, then the Warrant may only be exercised through a cashless exercise, as set forth in this Section 10.

In no event will the exercise of this Warrant be settled in cash.

11. *Limitations on Exercise.*

(a) Notwithstanding anything to the contrary contained herein, the Company shall not effect any exercise of this Warrant, and the Holder shall not be entitled to exercise this Warrant for a number of Warrant Shares in excess of that number of Warrant Shares which, upon giving effect or immediately prior to such exercise, would cause (i) the aggregate number of shares of Common Stock beneficially owned by the Holder, its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act to exceed 4.99% (the “**Maximum Percentage**”) of the total number of issued and outstanding shares of Common Stock of the Company following such exercise, or (ii) the combined voting power of the securities of the Company beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act to exceed 4.99% of the combined voting power of all of the securities of the Company then outstanding following such exercise. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Form 10-Q or Form 10-K, as the case may be, filed with the Commission prior to the date hereof, (y) a more recent public announcement by the Company or (z) any other notice by the Company or its transfer agent setting forth the number of shares of Common Stock outstanding. Upon the written request of the Holder, the Company shall within three (3) Trading Days confirm in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage specified in such notice; provided that any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company. For purposes of this Section 11(a), the aggregate number of shares of Common Stock or voting securities beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act shall include the shares of Common Stock issuable upon the exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (x) exercise of the remaining unexercised and non-cancelled portion of this Warrant by the Holder and (y) exercise or conversion of the unexercised, non-converted or non-cancelled portion of any other securities of the Company that do not have voting power (including without limitation any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including without limitation any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock), is subject to a limitation on conversion or exercise analogous to the limitation contained herein and is beneficially owned by the Holder or any of its Affiliates and other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act.

(b) This Section 11 shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9(c) of this Warrant.

12. *No Fractional Shares.* No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number.

13. *Notices.* Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail prior to 5:30 P.M., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or

communication is delivered via facsimile or confirmed e-mail on a day that is not a Trading Day or later than 5:30 P.M., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Aeglea BioTherapeutics, Inc.
Attention: Chief Financial Officer
901 S. MoPac Expressway, Barton Oaks Plaza One,
Suite 250, Austin, TX 78746
Telephone: (512) 394- 4188
Fax: (512) 872-5121
Email: cyork@aegleabio.com

If to the Holder, to its address, facsimile number or e-mail address set forth herein or on the books and records of the Company.

Or, in each of the above instances, to such other address, facsimile number or e-mail address as the recipient party has specified by written notice given to each other party at least five (5) days prior to the effectiveness of such change.

14. *Warrant Agent.* The Company shall initially serve as warrant agent under this Warrant. Upon 10 (10) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. *Miscellaneous.*

(a) No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares. Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate or articles of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(c) Successors and Assigns. Subject to compliance with applicable securities laws, this Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder, except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of the Warrants may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HERewith OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF ANY OF THE TRANSACTION DOCUMENTS), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF VIA REGISTERED OR CERTIFIED MAIL OR OVERNIGHT DELIVERY (WITH EVIDENCE OF DELIVERY) TO SUCH PERSON AT THE ADDRESS IN EFFECT FOR NOTICES TO IT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

(g) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(h) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

AEGLEA BIOTHERAPEUTICS, INC.

By: _____
Name:
Title:

SCHEDULE 1
FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. __ (the "Warrant") issued by Aeglea BioTherapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "Cashless Exercise" under Section 10 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. The Warrant Shares shall be delivered to the following DWAC Account Number:

(6) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 11(a) of the Warrant to which this notice relates.

Dated: _____
Name of Holder: _____
By: _____
Name: _____
Title: _____

(Signature must conform in all respects to name of Holder as specified on the face of the Warrant)

FORM OF LOCK-UP AGREEMENT

Lock-Up Agreement

February , 2019

J.P. MORGAN SECURITIES LLC
EVERCORE GROUP L.L.C.
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 Evercore Group L.L.C.
55 East 52nd Street
New York, New York 10055

Re: Aeglea BioTherapeutics, Inc. – Proposed Equity Offering

Ladies and Gentlemen:

The undersigned understands that you, as representatives (the “**Representatives**”) of the several Underwriters, propose to enter into an underwriting agreement (the “**Underwriting Agreement**”) with Aeglea 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 the common stock, par value \$0.0001 per share (the “**Securities**”) of the Company. 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 the Representatives 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 90 days after the date of the prospectus relating to the Public Offering (the “**Prospectus**”) (such period, the “**Restricted Period**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of common stock, \$0.0001 per share par value, of the Company (the “**Common Stock**”) or any securities convertible into or exercisable or exchangeable for Common Stock (including without limitation, Common

Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant), or publicly disclose the intention to make any offer, sale, pledge or disposition, (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) make any demand for or exercise any right with respect to the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock.

The restrictions set forth in the preceding paragraph shall not apply to:

- (1) if the undersigned is a natural person, any transfers made by the undersigned (a) as a bona fide gift to any member of the immediate family (as defined below) of the undersigned or to a trust the direct or indirect beneficiaries of which are exclusively the undersigned or members of the undersigned's immediate family, (b) by will or intestate succession upon the death of the undersigned, or (c) as a bona fide gift to a charity or educational institution;
- (2) if the undersigned is a corporation, partnership, limited liability company or other business entity, any transfers by such corporation, partnership, limited liability company or other business entity to any current or former stockholder, partner (which for additional clarity, includes limited partners) or member of, or owner of a similar equity interest in, the undersigned, as the case may be, (including, for the avoidance of doubt, a fund managed by the same manager or managing member or general partner or management company or by an entity controlling, controlled by, or under common control with such manager or managing member or general partner or management company as the undersigned or who shares a common investment advisor with the undersigned) if, in any such case, such transfer is not for value;
- (3) if the undersigned is a corporation, partnership, limited liability company or other business entity, any transfer made by such corporation, partnership, limited liability company or other business entity to another corporation, partnership, limited liability company or other business entity so long as the transferee is an affiliate (as defined below) of such corporation, partnership, limited liability company or other business entity and such transfer is not for value;
- (4) if the undersigned holds securities of the Company in a trust, transfers to the settlor or beneficiary of such trust or to the estate of a beneficiary of such trust;
- (5) transactions relating to (i) shares of Common Stock acquired by the undersigned in the Public Offering and (ii) shares of Common Stock or other

securities convertible into or exercisable or exchangeable for Common Stock acquired in open market transactions after completion of the Public Offering, provided that no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”) shall be required or shall be voluntarily made in connection with subsequent sales of Common Stock or other securities acquired by you in the Public Offering or in such open market transactions during the Restricted Period;

(6) any transaction relating to the transfer of shares of Common Stock to the Company pursuant to an agreement under which the Company has the option to repurchase shares upon termination of service of the undersigned or has a right of first refusal with respect to the transfer of such shares by the undersigned;

(7) the entry, by the undersigned, at any time on or after the date hereof, of any trading plan providing for the sale of Common Stock by the undersigned, which trading plan meets the requirements of Rule 10b5-1 under the Exchange Act, provided, however, that such plan does not provide for, or permit, the sale of any Common Stock during the Restricted Period and no public announcement or filing is voluntarily made or required by any party regarding such plan during the Restricted Period;

(8) any transfers made by the undersigned to the Company to satisfy tax withholding obligations pursuant to the Company’s equity incentive plans or arrangements disclosed in the Prospectus (as defined in the Underwriting Agreement) in connection with the vesting or exercise of the Company’s securities issued pursuant to such plan or arrangements);

(9) the transfer of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to a tender offer, merger, consolidation, binding share exchange or other similar transaction involving a change in control of the Company that results in all of the Company’s stockholders having the right to exchange their Common Stock for cash, securities or other property; provided that if such transaction is not consummated, any such securities shall remain subject to the restrictions set forth in this Letter Agreement;

(10) any transfers of securities of the Company pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of marriage or civil union;

(11) the exercise of any option, warrant or other right to acquire shares of Common Stock, the settlement of any stock-settled stock appreciation rights, restricted stock or restricted stock units, including through transfers to the Company in connection with a “net” or cashless exercise, granted and outstanding as of the date hereof or at the closing date of this Public Offering, or the conversion of any convertible security of the Company in accordance with its terms; and

(12) the sale or transfer of shares of Common Stock beneficially owned by the undersigned after the date that is 60 days after the date of the Underwriting Agreement; *provided* that the number of such beneficially owned shares that may be sold or transferred pursuant to this clause (12), combined with any other such sales or transfers by holders subject to similar agreements as this Letter Agreement, shall not exceed an aggregate of 1% of the issued and outstanding shares of Common Stock immediately after the consummation of the Public Offering.

provided, however, that (A) in the case of any transfer described in clause (1), (2), (3), (4), (9) or (10) above, it shall be a condition to the transfer that the transferee executes and delivers to the Representatives, acting on behalf of the Underwriters, not later than one business day prior to such transfer, a written agreement, in substantially the form of this Letter Agreement (it being understood that any references to “immediate family” in the agreement executed by such transferee shall expressly refer only to the immediate family of the undersigned and not to the immediate family of the transferee) and otherwise satisfactory in form and substance to the Representatives, and (B) in the case of any transfer described in clause (1), (2), (3), (4), (6), (8), (10) or (11) above, if the undersigned is required to file a report under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock during the Restricted Period, the undersigned shall include a statement in such report to the effect that, (i) in the case of any transfer pursuant to clause (1) above, such transfer is being made as a gift or by will or intestate succession, (ii) in the case of any transfer pursuant to clause (2) above, such transfer is being made to a stockholder, partner or member of, or owner of a similar equity interest in, the undersigned and is not a transfer for value, (iii) in the case of any transfer pursuant to clause (3) above, such transfer is being made either (a) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the undersigned’s capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned’s assets or (b) to another corporation, partnership, limited liability company or other business entity that is an affiliate of the undersigned and such transfer is not for value, (iv) in the case of any transfer pursuant to clause (4) above, such transfer is being made to a beneficiary of the undersigned and is not a transfer for value, (v) in the case of any transfer pursuant to clause (6) above, such transfer is being made pursuant to a right of repurchase or rights of first refusal by the Company, (vi) in the case of any transfer pursuant to clause (8) above, such transfer is being made to satisfy tax withholding obligations, (vii) in the case of any transfer pursuant to clause (10) above, such transfer is being made pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of marriage or civil union, or (viii) in the case of any transfer pursuant to clause (11) above, such transfer solely relates to such exercise, settlement or conversion, and that the underlying shares of Common Stock remain subject to this Letter Agreement. For purposes of clause (9), “change in control” shall mean the transfer (whether by tender offer, merger, consolidation or similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an Underwriter of the Public Offering), of the Company’s voting securities if, after such transfer, such person or group of affiliated persons would

hold more than 50% of the outstanding voting securities of the Company (or the surviving entity). For purposes of this paragraph, “immediate family” shall mean a spouse, child, grandchild or other lineal descendant (including by adoption), father, mother, brother or sister of the undersigned; and “affiliate” shall have the meaning set forth in Rule 405 under the Securities Act.

The undersigned further agrees that it will not, without the prior written consent of the Representatives, make any demand or request for or exercise any right with respect to the registration under the Securities Act, of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock beneficially owned by the undersigned during the Restricted Period. For the avoidance of doubt, the restrictions in the paragraph shall not apply to the exercise of “piggyback” rights by the undersigned in connection with a registered offering of Common Stock by the Company during the Restricted Period that is not in violation of the Underwriting Agreement, subject to the provisions of the immediately preceding paragraph.

In order to enable this covenant to be enforced, the undersigned hereby consents to the placing of legends or stop transfer instructions with the Company’s transfer agent with respect to any Common Stock (or securities convertible into or exercisable or exchangeable for Common Stock).

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Letter Agreement and that this Letter Agreement has been duly authorized (if the undersigned is not a natural person), executed and delivered by the undersigned and is a valid and binding agreement of the undersigned. This Letter Agreement and all authority herein conferred are irrevocable and shall survive the death or incapacity of the undersigned (if a natural person) and shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

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.

If (i) the Company notifies the Representatives or the Representatives notify the Company in writing that such party does not intend to proceed with the Public Offering, (ii) the Underwriting Agreement is not executed by March 31, 2019, (iii) if the Company files an application with the Securities and Exchange Commission to withdraw the registration statement related to the Public Offering or (iv) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated for any reason prior to payment for and delivery of any Common Stock to be sold thereunder, then this Letter Agreement shall immediately be terminated and the undersigned shall automatically be released from all of his or her obligations under this Letter Agreement. The undersigned acknowledges and agrees that whether or not any public offering of Common Stock actually occurs depends on a number of factors, including market conditions.

[Signature Page follows]

Very truly yours,

IF AN INDIVIDUAL:

By: _____
(duly authorized signature)

Name: _____
(please print full name)

Date: _____

IF AN ENTITY:

(please print complete name of entity)

By: _____
(duly authorized signature)

Name: _____
(please print full name)

Title: _____
(please print full title)

Date: _____

[Signature Page to Lock-Up Letter Agreement]

AMENDMENT NO. 1 TO UNDERWRITING AGREEMENT

February 6, 2019

This Amendment No. 1 (the “**Amendment**”) to the Underwriting Agreement dated February 5, 2019, by and among Aeglea BioTherapeutics, Inc. and J.P. Morgan Securities LLC and Evercore Group L.L.C., as Representatives of the several Underwriters named therein (the “**Underwriting Agreement**”) is made and entered into by and among Aeglea BioTherapeutics, Inc. and J.P. Morgan Securities LLC and Evercore Group L.L.C. Capitalized terms used herein but not herein defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the promises and mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the parties to the Underwriting Agreement hereby agree to amend the Underwriting Agreement as follows, effective as of February 5, 2019:

1. The number of Underwritten Shares shall be decreased to an aggregate of 3,500,000 shares of Common Stock.
2. The number of Warrants shall be increased to an aggregate of 4,000,000 Warrants.
3. Schedule 1 of the original Underwriting Agreement shall be amended and restated as follows:

Underwriter	Number of Underwritten Shares	Number of Warrants
J.P. Morgan Securities LLC	2,100,000	2,400,000
Evercore Group L.L.C.	1,050,000	1,200,000
H.C. Wainwright & Co., LLC	350,000	400,000
Total	<u>3,500,000</u>	<u>4,000,000</u>

4. Any reference to “this Agreement” within the original Underwriting Agreement shall be deemed to refer to the original Underwriting Agreement, as amended hereby.
5. Except as expressly provided herein, all provisions of the Original Underwriting Agreement shall remain in full force and effect.
6. This Amendment, and any claim, controversy or dispute arising under or related to this Amendment, shall be governed by and construed in accordance with the internal laws of the State of New York, without giving effect to its conflicts of laws principles.
7. This Amendment may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[Signature pages follow.]

If the foregoing is in accordance with the Underwriters' understanding of our agreement, kindly sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will amend the Underwriting Agreement in accordance with its terms.

Very truly yours,

AEGLEA BIOTHERAPEUTICS, INC.

By: /s/ Charles N. York II
Name: Charles N. York II
Title: CFO

Accepted: As of the date first written above

J.P. MORGAN SECURITIES LLC
EVERCORE GROUP L.L.C.

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

J.P. MORGAN SECURITIES LLC

By: /s/ Ben Burdett
Name: Ben Burdett
Title: Managing Director

EVERCORE GROUP L.L.C.

By: /s/ Jeff Rosichan
Name: Jeff Rosichan
Title: Senior Managing Director
Equity Capital Markets

AEGLEA BIOTHERAPEUTICS, INC.
FORM OF WARRANT TO PURCHASE COMMON STOCK

Number of Shares: []
(subject to adjustment)

Warrant No. []

Original Issue Date: [], 2019

Aeglea BioTherapeutics, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [] or its registered assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of [] shares of common stock, \$0.0001 par value per share (the “**Common Stock**”), of the Company (each such share, a “**Warrant Share**” and all such shares, the “**Warrant Shares**”) at an exercise price per share equal to \$0.0001 per share (as adjusted from time to time as provided in Section 9 herein, the “**Exercise Price**”) upon surrender of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”) at any time and from time to time on or after the date hereof (the “**Original Issue Date**”), subject to the following terms and conditions:

1. *Definitions.* For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**Affiliate**” means any Person directly or indirectly controlled by, controlling or under common control with, a Holder, as such terms are used in and construed under Rule 405 under the Securities Act, but only for so long as such control shall continue.

(b) “**Commission**” means the United States Securities and Exchange Commission.

(c) “**Closing Sale Price**” means, for any security as of any date, the last trade price for such security on the Principal Trading Market for such security, as reported by Bloomberg L.P., or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the last trade price, then the last trade price of such security prior to 4:00 P.M., New York City time, as reported by Bloomberg L.P., or if the security is not listed for trading on a national securities exchange or other trading market on the relevant date, the last quoted bid price for the security in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors’ determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) “**Principal Trading Market**” means the national securities exchange or other trading market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Original Issue Date, shall be the Nasdaq Global Market.

(e) “**Registration Statement**” means the Company’s Registration Statement on Form S-3 (File No. 333-217573), declared effective on May 30, 2017.

(f) “**Securities Act**” means the Securities Act of 1933, as amended.

(g) “**Trading Day**” means any weekday on which the Principal Trading Market is open for trading. If the Common Stock is not listed or admitted for trading, “**Trading Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in New York City are authorized or required by law or other governmental action to close.

(h) “**Transfer Agent**” means American Stock Transfer and Trust Company, LLC, the Company’s transfer agent and registrar for the Common Stock, and any successor appointed in such capacity.

2. Issuance of Securities; Registration of Warrants. The Warrant, as initially issued by the Company, is offered and sold pursuant to the Registration Statement. As of the Original Issue Date, the Warrant Shares are issuable under the Registration Statement. Accordingly, the Warrant and, assuming issuance pursuant to the Registration Statement or an exchange meeting the requirements of Section 3(a)(9) of the Exchange Act as in effect on the Original Issue Date, the Warrant Shares, are not “restricted securities” under Rule 144 promulgated under the Securities Act. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the “**Warrant Register**”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. Subject to compliance with all applicable securities laws, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment for all applicable transfer taxes (if any). Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “**New Warrant**”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. Exercise and Duration of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a “cashless exercise” if so indicated in the Exercise Notice pursuant to Section 10 below). The date on which such exercise notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

5. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three (3) Trading Days after the Exercise Date), upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with The Depository Trust Company (“**DTC**”) through its Deposit Withdrawal Agent Commission system, or if the Transfer Agent is not participating in the Fast Automated Securities Transfer Program (the “**FAST Program**”) or if the certificates are required to bear a legend regarding restriction on transferability, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. The Holder, or any natural person or legal entity (each, a “**Person**”) so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be.

(b) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. *Charges, Taxes and Expenses.* Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense (excluding any applicable stamp duties) in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; *provided, however*, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. *Replacement of Warrant.* If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. *Reservation of Warrant Shares.* The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed. The Company further covenants that it will not, without the prior written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding.

9. *Certain Adjustments.* The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date or as amended, as described in the Registration Statement, that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock, (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Exercise Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of

Common Stock outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Exercise Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Exercise Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) **Pro Rata Distributions.** If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph) or (iii) rights or warrants to subscribe for or purchase any security, or (iv) cash or any other asset (in each case, a “**Distribution**”), other than a reclassification as to which Section 9(c) applies, then in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the ownership limitation set forth in Section 11(a) hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the ownership limitation set forth in Section 11(a) hereof, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until the earlier of (i) such time, if ever, as the delivery to such Holder of such portion would not result in the Holder exceeding the ownership limitation set forth in Section 11(a) hereof and (ii) such time as the Holder has exercised this Warrant.

(c) **Fundamental Transactions.** If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity and in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one transaction or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a “**Fundamental Transaction**”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “**Alternate Consideration**”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless (i) the Alternate Consideration is solely cash and the Company provides for the simultaneous “cashless exercise” of this Warrant pursuant to Section 10 below or (ii) prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (c) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

(d) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to Section 9 (including any adjustment to the Exercise Price that would have been effected but for the final sentence in this paragraph (d)), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Common Stock then in effect.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest one-hundredth of one cent or the nearest share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least ten (10) days prior to the date such Fundamental Transaction is consummated. Holder agrees to maintain any information disclosed pursuant to this Section 9(g) in confidence until such information is publicly available, and shall comply with applicable law with respect to trading in the Company's securities following receipt any such information.

10. *Payment of Cashless Exercise Price*. Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a "cashless exercise," in which event the Company shall issue to the Holder the number of Warrant Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act as determined as follows:

$$X = Y [(A-B)/A]$$

where:

"X" equals the number of Warrant Shares to be issued to the Holder;

"Y" equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

"A" equals the Closing Sale Price per share of Common Stock as of the Trading Day on the date immediately preceding the Exercise Date; and

"B" equals the Exercise Price per Warrant Share then in effect on the Exercise Date.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “cashless exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the Commission continues to take the position that such treatment is proper at the time of such exercise). In the event that the Registration Statement or another registration statement registering the issuance of Warrant shares is, for any reason, not effective at the time of exercise of this Warrant, then the Warrant may only be exercised through a cashless exercise, as set forth in this Section 10.

In no event will the exercise of this Warrant be settled in cash.

11. *Limitations on Exercise.*

(a) Notwithstanding anything to the contrary contained herein, the Company shall not effect any exercise of this Warrant, and the Holder shall not be entitled to exercise this Warrant for a number of Warrant Shares in excess of that number of Warrant Shares which, upon giving effect or immediately prior to such exercise, would cause (i) the aggregate number of shares of Common Stock beneficially owned by the Holder, its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act to exceed 4.99% (the “**Maximum Percentage**”) of the total number of issued and outstanding shares of Common Stock of the Company following such exercise, or (ii) the combined voting power of the securities of the Company beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act to exceed 4.99% of the combined voting power of all of the securities of the Company then outstanding following such exercise. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Form 10-Q or Form 10-K, as the case may be, filed with the Commission prior to the date hereof, (y) a more recent public announcement by the Company or (z) any other notice by the Company or its transfer agent setting forth the number of shares of Common Stock outstanding. Upon the written request of the Holder, the Company shall within three (3) Trading Days confirm in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage specified in such notice; provided that any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company. For purposes of this Section 11(a), the aggregate number of shares of Common Stock or voting securities beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act shall include the shares of Common Stock issuable upon the exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (x) exercise of the remaining unexercised and non-cancelled portion of this Warrant by the Holder and (y) exercise or conversion of the unexercised, non-converted or non-cancelled portion of any other securities of the Company that do not have voting power (including without limitation any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including without limitation any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock), is subject to a limitation on conversion or exercise analogous to the limitation contained herein and is beneficially owned by the Holder or any of its Affiliates and other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act.

(b) This Section 11 shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9(c) of this Warrant.

12. *No Fractional Shares.* No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number.

13. *Notices.* Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail prior to 5:30 P.M., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or

communication is delivered via facsimile or confirmed e-mail on a day that is not a Trading Day or later than 5:30 P.M., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Aeglea BioTherapeutics, Inc.
Attention: Chief Financial Officer
901 S. MoPac Expressway, Barton Oaks Plaza One,
Suite 250, Austin, TX 78746
Telephone: (512) 394- 4188
Fax: (512) 872-5121
Email: cyork@aegleabio.com

If to the Holder, to its address, facsimile number or e-mail address set forth herein or on the books and records of the Company.

Or, in each of the above instances, to such other address, facsimile number or e-mail address as the recipient party has specified by written notice given to each other party at least five (5) days prior to the effectiveness of such change.

14. *Warrant Agent.* The Company shall initially serve as warrant agent under this Warrant. Upon 10 (10) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. *Miscellaneous.*

(a) No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares. Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate or articles of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(c) Successors and Assigns. Subject to compliance with applicable securities laws, this Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder, except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of the Warrants may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HERewith OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF ANY OF THE TRANSACTION DOCUMENTS), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF VIA REGISTERED OR CERTIFIED MAIL OR OVERNIGHT DELIVERY (WITH EVIDENCE OF DELIVERY) TO SUCH PERSON AT THE ADDRESS IN EFFECT FOR NOTICES TO IT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

(g) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(h) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

AEGLEA BIOTHERAPEUTICS, INC.

By: _____
Name:
Title:

SCHEDULE 1
FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. __ (the "Warrant") issued by Aeglea BioTherapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "Cashless Exercise" under Section 10 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. The Warrant Shares shall be delivered to the following DWAC Account Number:

(6) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 11(a) of the Warrant to which this notice relates.

Dated: _____

Name of Holder: _____

By: _____

Name: _____

Title: _____

(Signature must conform in all respects to name of Holder as specified on the face of the Warrant)



February 6, 2019

Aeglea BioTherapeutics, Inc.
901 S. MoPac Expressway
Barton Oaks Plaza Suite 250
Austin, TX 78746

Ladies and Gentlemen:

We deliver this opinion with respect to certain matters in connection with the offering by Aeglea BioTherapeutics, Inc., a Delaware corporation (the "**Company**"), of up to 3,500,000 shares of the Company's Common Stock, par value \$0.0001 per share (the "**Shares**") and pre-funded warrants (the "**Pre-Funded Warrants**") to purchase up to 4,000,000 shares of Common Stock (such shares issuable upon exercise of the Pre-Funded Warrants, the "**Pre-Funded Warrant Shares**"), to be issued pursuant to that certain Underwriting Agreement (the "**Underwriting Agreement**"), dated as of even date herewith, between the Company and J.P. Morgan Securities LLC and Evercore Group L.L.C. The Shares, Pre-Funded Warrants and the Pre-Funded Warrant Shares were registered pursuant to the Registration Statement on Form S-3 (File No. 333-217573) filed by the Company with the Securities and Exchange Commission (the "**Commission**") on May 1, 2017 (the "**Registration Statement**") under the Securities Act of 1933, as amended (the "**Securities Act**"), declared effective on May 30, 2017, including the prospectus dated May 30, 2017 included therein (the "**Base Prospectus**"), and as supplemented by the preliminary prospectus supplement dated February 5, 2019 and the final prospectus supplement dated February 6, 2019, both of which were filed with the Commission pursuant to Rule 424(b) under the Securities Act (such preliminary and final prospectus supplements collectively, the "**Prospectus Supplement**" and, together with the Base Prospectus, the "**Prospectus**"). The offering of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares by the Company pursuant to the Registration Statement, the Prospectus and the Underwriting Agreement is referred to herein as the "**Offering**."

In connection with our opinion expressed below we have examined originals or copies of the Underwriting Agreement, the Pre-Funded Warrants, the Company's Restated Certificate of Incorporation filed with, and certified by, the Delaware Secretary of State (the "**Restated Certificate**") and the Company's Restated Bylaws (the "**Bylaws**") and, together with the Restated Certificate, the "**Charter Documents**"), certain corporate proceedings of the Company's board of directors (the "**Board**") or a committee or committees of the Board and the Company's stockholders relating to the Registration Statement, the Company's Restated Certificate and Bylaws, and such other agreements, documents, certificates and statements of the Company, its transfer agent and public or government officials, as we have deemed advisable, and have examined such questions of law as we have considered necessary.

We have assumed, and express no opinion as to, the genuineness of all signatures on documents submitted to us, the authenticity and completeness of all documents submitted to us as originals, the conformity to originals and completeness of all documents submitted to us as copies, the legal capacity of all persons or entities executing the same, the absence of any undisclosed termination, modification, waiver or amendment to any document reviewed by us, the absence of any other extrinsic agreements or documents that might change or affect the interpretation or terms of documents we have reviewed, and the due authorization, execution and delivery of all such documents where due authorization, execution and delivery are prerequisites to the effectiveness thereof. In giving our opinion, we have also relied upon a good standing certificate regarding the Company issued by the Delaware Secretary of State dated February 5, 2019 and a management certificate addressed to us and dated of even date herewith executed by the Company containing certain factual representations by the Company (the "**Management Certificate**").

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of any laws other than the existing Delaware General Corporation Law.

With respect to the Pre-Funded Warrants, we have assumed that, as of each and every time any of the Pre-Funded Warrants are exercised, the Company will have a sufficient number of authorized and unissued shares of the Common Stock available for issuance under its Restated Certificate to permit full exercise of each of the Pre-Funded Warrants in accordance with their terms without the breach or violation of any other agreement, commitment or obligation of the Company.

In connection with our opinions expressed below, we have assumed that, (i) at or prior to the time of the issuance and delivery of any of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares, there will not have occurred any change in the law or the facts affecting the validity of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares, any change in actions of the Board or the Company's stockholders, or any amendments to the Restated Certificate or Bylaws, and (ii) at the time of the offer, issuance and sale of any Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares, no stop order suspending the Registration Statement's effectiveness will have been issued and remain in effect, and that the Registration Statement will not have been modified or rescinded. We also have assumed that the issuance and delivery of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares subsequent to the date hereof and the compliance by the Company with the terms of such Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares will not result in a violation of the Restated Certificate or any provision of any instrument or agreement then binding upon the Company or any restriction imposed by any court or governmental body then having jurisdiction over the Company.

Based upon, and subject to, the foregoing, it is our opinion that

- (i) the Shares that may be issued and sold by the Company pursuant to the Underwriting Agreement, when issued, sold and delivered in accordance with the provisions of, the Underwriting Agreement and in the manner and for the consideration stated in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable;
- (ii) when the Pre-Funded Warrants are issued, sold and delivered in the manner and for the consideration stated in the Registration Statement, and the Prospectus, such Pre-Funded Warrants will be valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles; and
- (iii) the Pre-Funded Warrant Shares, when issued and delivered by the Company upon exercise of the Warrants in accordance with the terms thereof, will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Report on Form 8-K to be filed by the Company with the Commission in connection with the offering of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares and further consent to all references to us, if any, in the Registration Statement, the Prospectus and any amendments or supplements thereto. We do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

This opinion is intended solely for use in connection with the issuance and sale of the Shares, the Pre-Funded Warrants and the Pre-Funded Warrant Shares subject to the Registration Statement and is not to be relied upon for any other purpose. In providing this opinion, we are opining only as to the specific legal issues expressly set forth above and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks, only as of the date of this letter first written above, is based solely on our understanding of facts in existence as of such date after the date of this opinion letter and does not address any potential change in facts or law that may occur after the date of this opinion letter. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify the opinion expressed herein.

[Signature Follows on Next Page]

Very truly yours,

FENWICK & WEST LLP

/s/ Fenwick & West LLP
