

**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): January 23, 2019

**SELECTA BIOSCIENCES, INC.**

(Exact name of registrant as specified in its charter)

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

**001-37798**  
(Commission  
File Number)

**26-1622110**  
(IRS Employer  
Identification No.)

**480 Arsenal Way**  
**Watertown, MA 02472**  
(Address of principal executive offices) (Zip Code)

**(617) 923-1400**  
Registrant's telephone number, including area code

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

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

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

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

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

---

## **Item 8.01. Other Events.**

On January 23, 2019, Selecta Biosciences, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Stifel, Nicolaus & Company, Incorporated, as representative of the several underwriters named therein (collectively, the “Underwriters”), in connection with the public offering, issuance and sale by the Company of 20,000,000 shares of the Company’s common stock, \$0.0001 par value per share, at a public offering price of \$1.50 per share, less underwriting discounts and commissions, pursuant to an effective shelf registration statement on Form S-3 (Registration No. 333-219900) and a related prospectus supplement filed with the Securities and Exchange Commission. Under the terms of the Underwriting Agreement, the Company has also granted the Underwriters an option exercisable for 30 days to purchase up to an additional 3,000,000 shares of its common stock at the public offering price, less underwriting discounts and commissions. The closing of the offering is expected to occur on or about January 25, 2019, subject to the satisfaction of customary closing conditions.

The Company expects to receive net proceeds from the offering of approximately \$27.9 million, or approximately \$32.1 million if the Underwriters exercise their option to purchase additional shares in full, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. The Company intends to use the net proceeds of the offering and a portion of its existing cash and cash equivalents to advance the clinical development of SEL-212, including the completion of a head-to-head superiority trial of SEL-212 compared to the current FDA-approved uricase therapy, completion of the Phase 2 clinical trial and preparations for a Phase 3 clinical trial, pursue other pre-clinical programs, including gene therapy development work, and for other operational activities and general corporate purposes.

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

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

Latham & Watkins LLP, counsel to the Company, has issued an opinion to the Company, dated January 24, 2018, regarding the validity of the shares of common stock to be issued and sold in the offering. A copy of the opinion is filed as Exhibit 5.1 to this Current Report on Form 8-K.

The Company believes that the net proceeds from the offering and its existing cash resources as of December 31, 2018 will be sufficient to enable the Company to fund its operating expenses and capital expenditure requirements into the second quarter of 2020.

### **Forward-Looking Statements Disclaimer**

This Current Report on Form 8-K (the “Current Report”) contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Current Report that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation references to the completion of the offering and the expected net proceeds therefrom, and our ability to fund our operating expenses and capital expenditure requirements into the second quarter of 2020. These forward-looking statements are based on management’s current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions relating to the offering. These and other important factors discussed under the caption “Risk Factors” in our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, or SEC, on November 8, 2018, and our other reports filed with the SEC could cause actual results to differ materially from those indicated by the forward-looking

statements made in this Current Report. Any such forward-looking statements represent management's estimates as of the date of this Current Report. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this Current Report.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">1.1</a>	<a href="#">Underwriting Agreement, dated January 23, 2019, between the Company and Stifel, Nicolaus &amp; Company, Incorporated, as representative of the several underwriters named therein.</a>
<a href="#">5.1</a>	<a href="#">Opinion of Latham &amp; Watkins LLP.</a>
<a href="#">23.1</a>	<a href="#">Consent of Latham &amp; Watkins LLP (included in Exhibit 5.1).</a>

**SIGNATURES**

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

SELECTA BIOSCIENCES, INC.

Date: January 24, 2019

By: /s/ Carsten Brunn, Ph.D.  
Carsten Brunn, Ph.D.  
President and Chief Executive Officer

**SELECTA BIOSCIENCES, INC.**

20,000,000 Shares

Common Stock  
(\$0.0001 par value per Share)

**UNDERWRITING AGREEMENT**

## UNDERWRITING AGREEMENT

January 23, 2019

Stifel, Nicolaus & Company, Incorporated  
787 7<sup>th</sup> Avenue, 11<sup>th</sup> Floor  
New York, New York 10019  
*as Managing Underwriter*

Ladies and Gentlemen:

Selecta Biosciences, Inc., a Delaware corporation (the “Company”), proposes to issue and sell to the underwriters named in Schedule A annexed hereto (the “Underwriters”), for whom you are acting as representative (the “Representative”), an aggregate of 20,000,000 shares (the “Firm Shares”) of common stock, \$0.0001 par value per share (the “Common Stock”), of the Company. In addition, the Company proposes to grant to the Underwriters the option to purchase from the Company up to an additional 3,000,000 shares of Common Stock (the “Additional Shares”). The Firm Shares and the Additional Shares are hereinafter collectively sometimes referred to as the “Shares.” The Shares are described in the Prospectus which is referred to below.

The Company has prepared and filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the “Act”), with the Securities and Exchange Commission (the “Commission”) a “shelf” registration statement on Form S-3 (File No. 333-219900) under the Act, including a basic prospectus, relating to the securities registered pursuant to such registration statement, which registration statement incorporates by reference documents which the Company has filed, or will file, in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the “Exchange Act”). Such registration statement has become effective under the Act.

Except where the context otherwise requires, “Registration Statement,” as used herein, means the registration statement, as amended, at the time of such registration statement’s effectiveness for purposes of Section 11 of the Act, as such section applies to the respective Underwriters (the “Effective Time”), including (i) all documents filed as a part thereof or incorporated or deemed to be incorporated by reference therein, (ii) any information contained or incorporated by reference in a prospectus filed with the Commission pursuant to Rule 424(b) under the Act, to the extent such information is deemed, pursuant to Rule 430B or Rule 430C under the Act, to be part of the registration statement at the Effective Time, and (iii) any registration statement filed to register the offer and sale of Shares pursuant to Rule 462(b) under the Act.

The Company has furnished to you, for use by the Underwriters and by dealers in connection with the offering of the Shares, copies of one or more preliminary prospectus supplements, and the documents incorporated by reference therein, relating to the Shares. Except where the context otherwise requires, “Pre-Pricing Prospectus,” as used herein, means each such preliminary prospectus supplement, in the form so furnished, including any basic prospectus (whether or not in preliminary form) furnished to you by the Company and attached to or used with such preliminary prospectus supplement. Except where the context otherwise requires, “Basic Prospectus,” as used herein, means any such basic prospectus and any basic prospectus furnished to you by the Company and attached to or used with the Prospectus Supplement (as defined below).

Except where the context otherwise requires, “Prospectus Supplement,” as used herein, means the final prospectus supplement, relating to the Shares, filed by the Company with the Commission pursuant to Rule 424(b) under the Act on or before the second business day after the date hereof (or such earlier time as may be required under the Act) in the form furnished by the Company to you for use by the Underwriters and by dealers in connection with the offering of the Shares.

Except where the context otherwise requires, “Prospectus,” as used herein, means the Prospectus Supplement together with the Basic Prospectus attached to or used with the Prospectus Supplement.

“Permitted Free Writing Prospectuses,” as used herein, means the documents listed on Schedule B attached hereto under the heading “Permitted Free Writing Prospectuses” and each “road show” (as defined in Rule 433 under the Act), if any, related to the offering of the Shares contemplated hereby that is a “written communication” (as defined in Rule 405 under the Act) (each such road show, an “Electronic Road Show”). The Underwriters have not offered or sold and will not offer or sell, without the Company’s consent, any Shares by means of any “free writing prospectus” (as defined in Rule 405 under the Act) that is required to be filed by the Underwriters or the Company with the Commission pursuant to Rule 433 under the Act, other than a Permitted Free Writing Prospectus.

“Covered Free Writing Prospectuses,” as used herein, means (i) each “issuer free writing prospectus” (as defined in Rule 433(h)(1) under the Act), if any, relating to the Shares, which is not a Permitted Free Writing Prospectus and (ii) each Permitted Free Writing Prospectus.

“Disclosure Package,” as used herein, means, collectively, the pricing information set forth on Schedule B attached hereto under the heading “Pricing Information Provided Orally by Underwriters,” the Pre-Pricing Prospectus and all Permitted Free Writing Prospectuses, if any, considered together.

“Applicable Time,” as used herein, means 8:30 A.M., New York City time, on January 23, 2019.

Any reference herein to the Registration Statement, any Basic Prospectus, any Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall be deemed to refer to and include the documents, if any, incorporated by reference, or deemed to be incorporated by reference, therein (the “Incorporated Documents”), including, unless the context otherwise requires, the documents, if any, filed as exhibits to such Incorporated Documents. Any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement, any Basic Prospectus, any Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall be deemed to refer to and include the filing of any document under the Exchange Act on or after the initial effective date of the Registration Statement, or the date of such Basic Prospectus, such Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus or such Permitted Free Writing Prospectus, as the case may be, and deemed to be incorporated therein by reference.

As used in this Agreement, “business day” shall mean a day on which the Nasdaq Global Market is open for trading. The terms “herein,” “hereof,” “hereto,” “hereinafter” and similar terms, as used in this Agreement, shall in each case refer to this Agreement as a whole and not to any particular section, paragraph, sentence or other subdivision of this Agreement. The term “or,” as used herein, is not exclusive.

The Company and the Underwriters agree as follows:

1. Sale and Purchase. Upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the respective Underwriters and each of the Underwriters, severally and not jointly, agrees to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule A attached hereto, subject to adjustment in accordance with Section 8 hereof, in each case at a purchase price of \$1.41 per Share. The Company is advised by you that the Underwriters intend (i) to make a public offering of their respective portions of the Firm Shares as soon after the effective date of the Registration Statement as in your judgment is advisable and (ii) initially to offer the Firm Shares upon the terms set forth in the Prospectus. You may from time to time increase or decrease the public offering price after the initial public offering to such extent as you may determine.

In addition, the Company hereby grants to the several Underwriters the option (the "Additional Shares Option") to purchase, and upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Underwriters shall have the right to purchase, severally and not jointly, from the Company, ratably in accordance with the number of Firm Shares to be purchased by each of them, all or a portion of the Additional Shares at the same purchase price per Share to be paid by the Underwriters to the Company for the Firm Shares less an amount per share equal to any dividend or distribution declared by the Company and payable on the Firm Shares but not payable on the Additional Shares. The Additional Shares Option may be exercised by the Representative on behalf of the several Underwriters at any time and from time to time on or before the thirtieth day following the date of the Prospectus, by written notice to the Company. Such notice shall set forth the aggregate number of Additional Shares as to which the Additional Shares Option is being exercised and the date and time when the Additional Shares are to be delivered (any such date and time being herein referred to as an "additional time of purchase"); provided, however, that no additional time of purchase shall be earlier than the "time of purchase" (as defined below) nor earlier than the second business day after the date on which the Additional Shares Option shall have been exercised (or first business day if in connection with the "time of purchase" (as defined below)) nor later than the tenth business day after the date on which the Additional Shares Option shall have been exercised. The number of Additional Shares to be sold to each Underwriter shall be the number which bears the same proportion to the aggregate number of Additional Shares being purchased as the number of Firm Shares set forth opposite the name of such Underwriter on Schedule A hereto bears to the total number of Firm Shares (subject, in each case, to such adjustment as the Representative may determine to eliminate fractional shares), subject to adjustment in accordance with Section 8 hereof.

2. Payment and Delivery. Payment of the purchase price for the Firm Shares shall be made to the Company by federal funds wire transfer against delivery of such Firm Shares to you through the facilities of The Depository Trust Company ("DTC") for the respective accounts of the Underwriters. Such payment and delivery shall be made at 10:00 A.M., New York City time, on the date of the closing (unless another time shall be agreed to by you and the Company or unless postponed in accordance with the provisions of Section 8 hereof). The time at which such payment and delivery are to be made is hereinafter sometimes called the "time of purchase." Electronic transfer of the Firm Shares shall be made to you at the time of purchase in such names and in such denominations as you shall specify.

Payment of the purchase price for the Additional Shares shall be made at the additional time of purchase in the same manner and at the same office and time of day as the payment for the Firm Shares. Electronic transfer of the Additional Shares shall be made to you at the additional time of purchase in such names and in such denominations as you shall specify.

Deliveries of the documents described in Section 6 hereof with respect to the purchase of the Shares shall be made at the offices of Cooley LLP at 1114 Avenue of the Americas New York, New York 10036, at 9:00 A.M., New York City time, on the date of the closing of the purchase of the Firm Shares or



the Additional Shares, as the case may be.

3. Representations and Warranties of the Company. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) the Registration Statement has heretofore become effective under the Act or, with respect to any registration statement to be filed to register the offer and sale of Shares pursuant to Rule 462(b) under the Act, will be filed with the Commission and become effective under the Act no later than 10:00 P.M., New York City time, on the date of determination of the public offering price for the Shares; no stop order of the Commission preventing or suspending the use of any Basic Prospectus, any Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus, or the effectiveness of the Registration Statement, has been issued, and no proceedings for such purpose have been instituted or, to the Company's knowledge, are contemplated by the Commission;

(b) as of the Effective Time, the Registration Statement complied in all material respects with the requirements of the Act and, if filed by electronic transmission pursuant to the Commission's Electronic Data Gathering, Analysis, and retrieval system ("EDGAR") (except as may be permitted by Regulation S-T under the Act), was identical to the copy thereof delivered to the Underwriters for use; the conditions to the use of Form S-3 in connection with the offering and sale of the Shares as contemplated hereby have been satisfied; the Registration Statement meets, and the offering and sale of the Shares as contemplated hereby complies with, the requirements of Rule 415 under the Act; the Registration Statement did not, as of the Effective Time, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; each Pre-Pricing Prospectus complied, at the time it was filed with the Commission, and complies as of the date hereof, in all material respects, with the requirements of the Act; the Disclosure Package, as of the Applicable Time, did not include 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; the Prospectus will comply, as of the date that it is filed with the Commission, the time of purchase, each additional time of purchase, if any, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, in all material respects, with the requirements of the Act (including, without limitation, Section 10(a) of the Act); at no time during the period that begins on the date of the Prospectus Supplement and ends at the later of the time of purchase, the latest additional time of purchase, if any, and the end of the period during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares did or will the Prospectus, as then amended or supplemented, include 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 Company makes no representation or warranty in this Section 3(b) with respect to any statement contained in the Registration Statement, the Disclosure Package or the Prospectus made in reliance upon and in conformity with information concerning an Underwriter and furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in the Registration Statement, the Disclosure Package or the Prospectus; each Incorporated Document, at the time such document was filed, or will be filed, with the Commission or at the time such document became or becomes effective, as applicable, complied or will comply, in all material respects, with the requirements of the Exchange Act and did not or will not, as applicable, include 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;

(c) prior to the execution of this Agreement, the Company has not, directly or indirectly, offered or sold any Shares by means of any “prospectus” (within the meaning of the Act) or used any “prospectus” (within the meaning of the Act) in connection with the offer or sale of the Shares, in each case other than the Pre-Pricing Prospectuses and the Permitted Free Writing Prospectuses, if any; the Company has not, directly or indirectly, prepared, used or referred to any Permitted Free Writing Prospectus except in compliance with Rules 164 and 433 under the Act; assuming that such Permitted Free Writing Prospectus is accompanied or preceded by the Pre-Pricing Prospectus or the Prospectus, as the case may be, and that such Permitted Free Writing Prospectus is so sent or given after the Registration Statement was filed with the Commission (and after such Permitted Free Writing Prospectus was, if required pursuant to Rule 433(d) under the Act, filed with the Commission), the sending or giving, by any Underwriter, of any Permitted Free Writing Prospectus will satisfy the provisions of Rule 164 and Rule 433 (without reliance on subsections (b), (c) and (d) of Rule 164); the Pre-Pricing Prospectus dated January 22, 2019 is a prospectus that, other than by reason of Rule 433 or Rule 431 under the Act, satisfies the requirements of Section 10 of the Act, including a price range where required by rule; neither the Company nor the Underwriters are disqualified, by reason of subsection (f) or (g) of Rule 164 under the Act, from using, in connection with the offer and sale of the Shares, “free writing prospectuses” (as defined in Rule 405 under the Act) pursuant to Rules 164 and 433 under the Act; the Company is not an “ineligible issuer” (as defined in Rule 405 under the Act) as of the eligibility determination date for purposes of Rules 164 and 433 under the Act with respect to the offering of the Shares contemplated by the Registration Statement, without taking into account any determination by the Commission pursuant to Rule 405 under the Act that it is not necessary under the circumstances that the Company be considered an “ineligible issuer”; the parties hereto agree and understand that the content of any and all “road shows” (as defined in Rule 433 under the Act) related to the offering of the Shares contemplated hereby is solely the property of the Company; the Company has caused there to be made available at least one version of a “*bona fide* electronic road show” (as defined in Rule 433 under the Act) in a manner that, pursuant to Rule 433(d)(8)(ii) under the Act, causes the Company not to be required, pursuant to Rule 433(d) under the Act, to file, with the Commission, any Electronic Road Show; the Company has not engaged in any oral or written communications pursuant to Section 5(d) of the Act in connection with the offering contemplated hereby;

(d) from the time of the initial confidential submission of the registration statement for the Company’s initial public offering to the Commission through the date of this Agreement, the Company has been and is an emerging growth company (“EGC”), as defined in Section 2(a)(19) of the Act;

(e) as of the date of this Agreement, the Company has an authorized and outstanding capitalization, or will have an authorized and outstanding capitalization upon the purchase of the Shares, in each case, as set forth in the sections of the Registration Statement, the Disclosure Package and the Prospectus entitled “The Offering” and “Description of Capital Stock” (and any similar sections or information, if any, contained in any Permitted Free Writing Prospectus), and, as of the time of purchase and any additional time of purchase, as the case may be, the Company shall have an authorized and outstanding capitalization, or will have an authorized and outstanding capitalization upon the time of such purchase, in each case, as set forth in the sections of the Registration Statement, the Disclosure Package and the Prospectus entitled “The Offering” and “Description of Capital Stock” (and any similar sections or information, if any, contained in any Permitted Free Writing Prospectus) (subject, in each case, to the issuance of shares of Common Stock upon exercise of stock

options and warrants disclosed as outstanding in the Registration Statement, the Disclosure Package and the Prospectus); all of the issued and outstanding shares of capital stock, including the Common Stock, of the Company have been duly authorized and validly issued and are fully paid and non-assessable, have been issued in compliance with all applicable securities laws and were not issued in violation of any preemptive right, resale right, right of first refusal or similar right; the Common Stock, including the Shares, is registered pursuant to Section 12(b) of the Exchange Act and has been listed on the Nasdaq Global Market, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Global Market, nor has the Company received any notification that the Commission or the Nasdaq Global Market is contemplating terminating such registration or listing;

(f) the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with full corporate power and authority to own, lease and operate its properties and conduct its business as described in the Registration Statement, the Disclosure Package and the Prospectus, and to execute and deliver this Agreement and to issue, sell and deliver the Shares as contemplated herein;

(g) the Company is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the ownership or leasing of its properties or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing would not, individually or in the aggregate, either (i) have a material adverse effect on the business, properties, financial condition, results of operations or prospects related thereto of the Company and the Subsidiaries (as defined below) taken as a whole, (ii) prevent or materially interfere with the consummation of the transactions contemplated hereby or (iii) result in the delisting of shares of Common Stock from the Nasdaq Global Market (the occurrence of any such effect or any such prevention or interference or any such result described in the foregoing clauses (i), (ii) or (iii) being herein referred to as a “Material Adverse Effect”);

(h) the Company has no subsidiaries (as defined under the Act) other than Selecta (RUS) Limited Liability Company and Selecta Biosciences Security Corporation (collectively, the “Subsidiaries”); the Company owns all of the issued and outstanding membership interests or capital stock of each of the Subsidiaries; other than the membership interests or capital stock of the Subsidiaries, the Company does not own, directly or indirectly, any shares of stock or any other equity interests or long-term debt securities of any corporation, firm, partnership, joint venture, association or other entity; complete and correct copies of the charters and the bylaws or similar governing documents of the Company and each Subsidiary and all amendments thereto have been delivered to you (including by being made available to you through EDGAR), and no changes therein will be made on or after the date hereof through and including the time of purchase or, if later, any additional time of purchase; each Subsidiary has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, with full limited liability company or corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the Disclosure Package and the Prospectus; each Subsidiary is duly qualified to do business as a foreign limited liability company or corporation and is in good standing in each jurisdiction where the ownership or leasing of its properties or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; all of the outstanding membership interests or shares of capital stock of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and non-assessable, have

been issued in compliance with all applicable securities laws, were not issued in violation of any preemptive right, resale right, right of first refusal or similar right and are owned by the Company subject to no security interest, other encumbrance or adverse claims; no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligation into shares of capital stock or ownership interests in the Subsidiaries are outstanding; and each "significant subsidiary" of the Company, as that term is defined in Rule 1-02(w) of Regulation S-X under the Act, is listed in Exhibit 21.1 to the Company's Registration Statement on Form S-1 (No. 333-211555) filed May 24, 2016 (or otherwise in a subsequent filing available on EDGAR);

(i) the Shares 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 free of statutory and contractual preemptive rights, resale rights, rights of first refusal and similar rights, except for any such rights that have been waived; the Shares, when issued and delivered against payment therefor as provided herein, will be free of any restriction upon the voting or transfer thereof pursuant to the Delaware General Corporation Law or the Company's Certificate of Incorporation (the "Charter") and Bylaws (the "Bylaws"), each as amended to date and in the form filed as an exhibit to the Registration Statement, and any agreement or other instrument to which the Company is a party, except for any such rights that have been waived;

(j) the capital stock of the Company, including the Shares, conforms in all material respects to each description thereof, if any, contained or incorporated by reference in the Registration Statement, the Disclosure Package and the Prospectus; and the certificates for the Shares are in due and proper form;

(k) this Agreement has been duly authorized, executed and delivered by the Company;

(l) neither the Company nor any of the Subsidiaries is in breach or violation of or in default under (nor has any event occurred which, with notice, lapse of time or both, would reasonably be expected to result in any breach or violation of, constitute a default under or give the holder of any indebtedness (or a person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a part of such indebtedness under) (A) its charter or bylaws or similar governing documents, or (B) any indenture, mortgage, deed of trust, bank loan or credit agreement or other evidence of indebtedness, or any material license, lease, contract or other agreement or instrument to which it is a party or by which it or any of its properties may be bound or affected, or (C) any U.S. or Russian federal, state, local or foreign law, regulation or rule, or (D) any rule or regulation of any self-regulatory organization or other non-governmental regulatory authority having jurisdiction over the Company or the Subsidiaries (including, without limitation, the rules and regulations of the Nasdaq Global Market), or (E) any decree, judgment or order applicable to it or any of its properties, except in the case of the foregoing clauses (B), (C), (D) and (E), for any such breaches, violations, defaults or events that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(m) the execution, delivery and performance of this Agreement, the issuance and sale of the Shares and the consummation of the transactions contemplated hereby will not conflict with, result in any breach or violation of or constitute a default under (nor constitute any event which, with notice, lapse of time or both, would reasonably be expected to result in any breach or violation of, constitute a default under or give the holder of any indebtedness (or a person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a part of such indebtedness under) (or result in the creation or imposition of a lien, charge or encumbrance on any property or assets of the Company or any Subsidiary pursuant to) (A) the Charter or Bylaws of the Company or

similar organizational documents of any of the Subsidiaries, or (B) any indenture, mortgage, deed of trust, bank loan or credit agreement or other evidence of indebtedness, or any license, lease, contract or other agreement or instrument to which the Company or any of the Subsidiaries is a party or by which any of them or any of their respective properties is subject, or (C) any U.S. or Russian federal, state, local or foreign law, regulation or rule, or (D) any rule or regulation of any self-regulatory organization or other non-governmental regulatory authority having jurisdiction over the Company or the Shares (including, without limitation, the rules and regulations of the Nasdaq Global Market), or (E) any decree, judgment or order applicable to the Company or any of the Subsidiaries or any of their respective properties; except in the case of the foregoing clauses (B), (C), (D) and (E), for any such breaches, violations, defaults, repurchases, redemptions, repayments or events that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(n) no approval, authorization, consent or order of or filing with any federal, state, local or foreign governmental or regulatory commission, board, body, authority or agency, or of or with any self-regulatory organization or other non-governmental regulatory authority (including, without limitation, the Nasdaq Global Market), or approval of the stockholders of the Company is required in connection with the issuance and sale of the Shares or the consummation by the Company of the transactions contemplated hereby, other than (i) registration of the Shares under the Act, which has been effected (or, with respect to any registration statement to be filed hereunder pursuant to Rule 462(b) under the Act, will be effected in accordance herewith), (ii) any necessary qualification under the securities or blue sky laws of the various jurisdictions in which the Shares are being offered by the Underwriters, (iii) under the Conduct Rules of the Financial Industry Regulatory Authority, Inc. ("FINRA"); (iv) any listing applications and related consents or any notices required by the Nasdaq Global Market in the ordinary course of the offering of the Shares, or (v) filings with the Commission pursuant to Rule 424(b) under the Act, except as have already been made, obtained or waived or where the failure to obtain any such approval, authorization, consent, order or filing would not impair the ability of the Company to issue and sell the Shares or to consummate the transactions contemplated by this Agreement;

(o) except as described in the Registration Statement, the Disclosure Package and the Prospectus or as otherwise have been waived (i) no person has the right, contractual or otherwise, to cause the Company to issue or sell to it any shares of Common Stock or shares of any other capital stock or other equity interests of the Company, (ii) no person has any preemptive rights, resale rights, rights of first refusal or other rights to purchase any shares of Common Stock or shares of any other capital stock or other equity interests in the Company and (iii) no person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Shares; no person has the right, contractual or otherwise, to cause the Company to register under the Act any shares of Common Stock or shares of any other capital stock or other equity interests in the Company or to include any such shares or interests in the Registration Statement or the offering contemplated thereby other than those that have been otherwise waived;

(p) except for licenses, authorizations, consents and approvals required to be obtained from the Food and Drug Administration of the U.S. Department of Health and Human Services, each of the Company and the Subsidiaries has obtained all necessary licenses, authorizations, consents and approvals from all applicable authorities, in each case, as required to conduct their respective businesses as currently conducted, except where the failure to obtain such license, authorization, consent or approval or make such filing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; neither the Company nor any of the Subsidiaries is in violation of, or in default under, or has received written notice of any proceedings from any applicable

governmental or regulatory authority relating to the revocation or adverse modification of, any such license, authorization, consent or approval, except as described in the Registration Statement, the Disclosure Package and the Prospectus or where such violation, default, revocation or adverse modification would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(q) except as described in the Registration Statement, the Disclosure Package and the Prospectus, there is no legal, governmental, administrative or regulatory investigation, action, suit, claim or proceeding pending or, to the Company's knowledge, threatened to which the Company or any of its Subsidiaries or any of their respective officers or directors is a party (in their respective capacities as such), or to which any property of the Company or the Subsidiaries is or would reasonably be expected to be subject, before any court, board, body, regulatory or non-regulatory administrative agency or competent authority, which if determined adversely to the Company or any of the Subsidiaries would, individually or in the aggregate, have a Material Adverse Effect;

(r) Ernst & Young LLP, whose report on the consolidated financial statements of the Company and the Subsidiaries is included in the Registration Statement, the Disclosure Package and the Prospectus, are independent registered public accountants as required by the Act and by the rules of the Public Company Accounting Oversight Board;

(s) the financial statements included in the Registration Statement, the Disclosure Package and the Prospectus, together with the related notes and schedules present fairly, in all material respects, the consolidated financial position of the Company and the Subsidiaries as of the dates indicated and the consolidated results of operations, cash flows and changes in stockholders' equity of the Company and the Subsidiaries for the periods specified, and have been prepared in material compliance with the requirements of the Act and the Exchange Act and in conformity with United States generally accepted accounting principles ("GAAP") applied on a consistent basis during the periods involved, and all adjustments necessary for a fair presentation of results for such periods have been made; all pro forma financial information included in the Registration Statement, the Disclosure Package and the Prospectus presents fairly in all material respects the information shown therein, has been prepared in accordance with the provisions of the Act and the Rules and Regulations with respect to pro forma financial information, has been properly compiled on the pro forma bases described therein in accordance with the provisions of the Act and the Rules and Regulations, and the assumptions used in the preparation thereof are reasonable and the adjustments therein are appropriate to give effect to the transactions or circumstances referred to therein; the summary and selected combined financial and operating data included in the Registration Statement, the Disclosure Package and the Prospectus present fairly in all material respects the information shown therein and such data have been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company; there are no financial statements (historical or pro forma) that are required to be included in the Registration Statement, the Disclosure Package or the Prospectus that are not included as required; the Company and the Subsidiaries do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations), that are not described in the Registration Statement, the Disclosure Package and the Prospectus; and any disclosures contained in the Registration Statement, the Disclosure Package and the Prospectus that constitute "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K under the Act, to the extent applicable; the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Disclosure Package and the Prospectus 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;

(t) except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, each stock option granted under any stock option plan of the Company or any Subsidiary (each, a "Stock Plan") was granted with a per share exercise price no less than the fair market value per share of Common Stock, or, with respect to incentive stock options granted to an employee who on the date of grant was the owner of stock possessing more than 10% of the total combined voting power of all classes of stock of the Company (after taking into account the attribution of stock ownership rules of Section 424(d) of the Internal Revenue Code of 1986, as amended (the "Code"), no less than 110% of the fair market value per share of Common Stock, on the grant date of such option, as determined by the Company's board of directors, and no such grant involved any "back-dating," "forward-dating" or similar practice with respect to the effective date of such grant; except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, each such option (i) was granted in compliance with applicable law and with the applicable Stock Plan(s), (ii) was duly approved by the board of directors (or a duly authorized committee thereof or an officer of the Company duly authorized by the board of directors or authorized committee thereof to make such grants) of the Company or such Subsidiary, as applicable, and (iii) has been properly accounted for in the Company's financial statements in accordance with GAAP;

(u) except as otherwise set forth or contemplated in the Registration Statement, the Disclosure Package or the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, in each case, excluding any amendments or supplements to the foregoing made after the execution of this Agreement, there has not been (i) any material adverse change, or any development involving a prospective material adverse change, in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, (ii) any transaction which is material to the Company and the Subsidiaries taken as a whole, (iii) any obligation or liability, direct or contingent (including any off-balance sheet obligations), incurred by the Company or any Subsidiary, which is material to the Company and the Subsidiaries taken as a whole, (iv) any change in the capital stock or outstanding indebtedness of the Company or any Subsidiaries (other than borrowings in the ordinary course of business under the Company's Loan and Security Agreement, as amended on December 31, 2015, and as described in the Registration Statement, the Disclosure Package and the Prospectus, the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in the Registration Statement, the Disclosure Package and the Prospectus, the grant in the ordinary course of business of awards under equity incentive plans described in the Registration Statement, the Disclosure Package and the Prospectus and the repurchase by the Company or forfeiture of shares of common stock by the holder thereof pursuant to the terms of equity awards described as outstanding in the Registration Statement, the Disclosure Package and the Prospectus) or (v) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company or any Subsidiary;

(v) the Company has obtained, for the benefit of the Underwriters, executed copies of lock-up agreements, to the effect set forth as Exhibit A hereto (a "Lock-Up Agreement"), from each officer and director of the Company;

(w) neither the Company nor any Subsidiary is and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof, neither of the Company nor any Subsidiary will be, an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended (the "Investment Company Act"), or a "passive foreign investment company" or a "controlled foreign corporation,"

as such terms are defined in the Code;

(x) neither the Company nor the Subsidiaries own any real property; the Company and each of the Subsidiaries have good and marketable title to all tangible personal property described in the Registration Statement, the Disclosure Package and the Prospectus as being owned by any of them, free and clear of all liens, claims, security interests or other encumbrances, except those that do not materially interfere with the use or proposed use of such property by the Company or the Subsidiary, respectively, or as would not materially or adversely affect the value of such property; all the property described in the Registration Statement, the Disclosure Package and the Prospectus as being held under lease by the Company or a Subsidiary is held thereby under valid, subsisting and enforceable leases, except where such failure to hold such property would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and except that the enforcement thereof may be subject to (i) bankruptcy, insolvency, reorganization, receivership, moratorium, fraudulent conveyance or other similar laws relating to creditor's rights generally and (ii) general principles of equity and the discretion of the court before which any proceeding therefor may be brought;

(y) except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company and the Subsidiaries own, or have obtained valid and enforceable licenses for, or other rights to use, the patent applications, patents, trademarks, trademark registrations, tradenames, service marks, copyrights, trade secrets and other unpatented or unpatentable proprietary information necessary for, or used in the conduct, or the proposed conduct, of the business of the Company and its Subsidiaries taken as a whole in the manner described in the Registration Statement, the Disclosure Package and the Prospectus (collectively, "Intellectual Property"), except as such failure to own or obtain rights would not result in a Material Adverse Effect; except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus (i) to the knowledge of the Company, there are no third parties who have any ownership rights in or to any Intellectual Property that is owned by the Company, and, to the knowledge of the Company, no third party has any ownership right in or to any Intellectual Property in any field of use that is exclusively licensed to the Company, other than the licensor to the Company of such Intellectual Property; (ii) the Company has not received written notice of any material infringement by third parties of any Intellectual Property; (iii) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others alleging that the Company is infringing, misappropriating, diluting or otherwise violating any rights of others with respect to any Intellectual Property; (iv) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity, enforceability or scope of any of the patent or patent applications owned or exclusively licensed by the Company included in the Intellectual Property; (v) the Company has not received written notice of any claim of material infringement with any asserted rights of others with respect to any of the Company's products, proposed products, processes or Intellectual Property; (vi) except as would not reasonably be expected to result in a Material Adverse Effect, the development, sale and any currently proposed use of any of the products, proposed products or processes of the Company referred to in the Registration Statement, the Disclosure Package and the Prospectus, in the current or proposed conduct of the businesses of the Company in the manner and to the extent described in the Registration Statement, the Disclosure Package and the Prospectus, do not currently, and will not upon commercialization, infringe any right or valid patent claim of any third party; (vii) to the knowledge of the Company, the parties prosecuting the patents and patent applications owned or licensed to the Company or under which the Company has rights included in the Intellectual Property have complied with their duty of candor and disclosure to the U.S. Patent and Trademark Office (the "USPTO") in connection with such applications and the Company is not aware of any facts required to be disclosed



to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application, or in the view of the Company could form a reasonable basis of a finding of invalidity with respect to any patents that have issued with respect to such applications; (viii) there is no prior art that may render any patent application within the Intellectual Property unpatentable that has not been disclosed to the U.S. Patent and Trademark Office or of which the Company is otherwise aware; (ix) the product candidates described in the Registration Statement, the Disclosure Package and the Prospectus as under development by the Company or any Subsidiary fall within the scope of the claims of one or more patents owned by, or exclusively licensed to, the Company or any Subsidiary; and (x) to the Company's knowledge, there is no patent or published patent application in the U.S. or other jurisdiction which contains claims that dominate or may dominate the Intellectual Property or that interferes with the issued or pending claims of any such Intellectual Property; the description of the Intellectual Property included or incorporated by reference in the Registration Statement, the Disclosure Package and the Prospectus is accurate and complete in all material respects and presents fairly the information purported to be described therein;

(z) except for matters which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, there is (A) no unfair labor practice complaint pending or, to the Company's knowledge, threatened against the Company or any of the Subsidiaries before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending, or to the Company's knowledge, threatened and (B) no strike, labor dispute, slowdown or stoppage pending or, to the Company's knowledge, threatened against the Company or any of the Subsidiaries or against any of the principal suppliers, contractors or customers of the Company or any of its Subsidiaries;

(aa) the Company and the Subsidiaries are in compliance with, and hold all permits, authorizations and approvals required under, Environmental Laws (as defined below), except to the extent that failure to so comply or to hold such permits, authorizations or approvals would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; the Company and the Subsidiaries are not aware of any non-compliance with Environmental Laws, any past or present events, conditions, activities, practices, actions, omissions or plans that could reasonably be expected to result in non-compliance with Environmental Laws or any current liabilities under Environmental Laws, that could individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; the Company and the Subsidiaries (i) are not the subject of any investigation known to the Company, (ii) have not received any notice or claim, (iii) are not a party to any pending or, to the Company's knowledge, threatened action, suit or proceeding, (iv) are not bound by any judgment, decree or order or (v) have not entered into any agreement, in each case relating to any alleged violation of any Environmental Law or any actual or alleged release or threatened release or cleanup at any location of any Hazardous Materials (as defined below) (as used herein, "Environmental Law" means any federal, state, local or foreign law, statute, ordinance, rule, regulation, order, decree, judgment, injunction, permit, license, authorization or other legal requirement relating to health, safety or the protection, cleanup or restoration of the environment or natural resources, including those relating to the distribution, processing, generation, treatment, storage, disposal, transportation, other handling or release or threatened release of Hazardous Materials, and "Hazardous Materials" means any material (including, without limitation, pollutants, contaminants, hazardous or toxic substances or wastes) that is regulated by or may give rise to liability under any Environmental Law);

(bb) except as described in the Registration Statement, the Disclosure Package or the Prospectus, all material tax returns required to be filed by the Company or any of the Subsidiaries

have been filed (subject to permitted extensions), and all material taxes and other assessments of a similar nature (whether imposed directly or through withholding) including any material interest, additions to tax or penalties applicable thereto due or claimed to be due from such entities have been paid, other than those being contested in good faith and for which adequate reserves have been provided;

(cc) the Company and each of the Subsidiaries maintain insurance covering their respective properties, operations, personnel and businesses as the Company reasonably deems adequate; such insurance insures against such losses and risks in accordance with customary industry practice to protect the Company and the Subsidiaries and their respective businesses and which is commercially reasonable for the current conduct of their respective businesses; to the Company's knowledge, all such insurance is fully in force on the date hereof and is expected to be fully in force at the time of purchase and each additional time of purchase, if any; neither the Company nor any Subsidiary has reason to believe that it will not be able to (i) renew any such insurance as and when such insurance expires or (ii) obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted at a cost that would not, individually or in the aggregate, reasonably be expected to result in any Material Adverse Effect;

(dd) except as referred to or described in the Registration Statement, the Disclosure Package or the Prospectus, neither the Company nor any Subsidiary has sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements referred to or described in the Registration Statement, the Disclosure Package or the Prospectus, and no such termination or non-renewal has been threatened by the Company or any Subsidiary or, to the Company's knowledge, any counterparty to any such contract or agreement;

(ee) the Company and the Subsidiaries maintain a system of "internal controls over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that has been designed by, or under the supervision of, the Company's principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that: (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 asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization and any unauthorized access that could have a material effect on the Company's financial statements is timely detected; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, there are no material weaknesses in the Company's internal controls. The auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which have adversely affected or are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting;

(ff) the Company and its Subsidiaries have established and maintain and evaluate "disclosure controls and procedures" (as such term is defined in Rule 13a-15 under the Exchange Act); such disclosure controls and procedures have been designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's

Chief Executive Officer and its Chief Financial Officer by others within those entities, and such disclosure controls and procedures are effective to perform the functions for which they were established; no “significant deficiencies” or “material weaknesses” (as such terms are defined in Rule 1-02(a)(4) of Regulation S-X under the Act) of the Company were identified in connection with the audit by the Company’s independent registered public accountants of the Company’s financial statements for the fiscal year ended December 31, 2017; since the date of the most recent evaluation of such disclosure controls and procedures and internal controls, there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses and the principal executive officer and principal financial officer of the Company have made all certifications required by the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”) and any related rules and regulations promulgated by the Commission, and the statements contained in each such certification are complete and correct in all material respects;

(gg) the Company has taken all actions reasonably necessary to ensure that the Company and the Subsidiaries and their respective officers and directors, in their capacities as such, are in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act and the rules and regulations promulgated in connection therewith;

(hh) each “forward-looking statement” (within the meaning of Section 27A of the Act or Section 21E of the Exchange Act) contained in the Registration Statement, the Disclosure Package and the Prospectus has been made or reaffirmed with a reasonable basis and in good faith;

(ii) all statistical or market-related data included in the Registration Statement, the Disclosure Package and the Prospectus are based on or derived from sources that the Company reasonably believes to be reliable and accurate;

(jj) none of the Company, any of the Subsidiaries or any of their respective officers or directors or, to the knowledge of the Company, any agent, employee or controlled affiliate of the Company or any of the Subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “Foreign Corrupt Practices Act”), or the OECD Convention on Bribery of Foreign Public Officials in International Business Transactions (the “OECD Convention”); the Company, the Subsidiaries and, to the knowledge of the Company, its controlled affiliates have instituted and maintain policies and procedures designed to ensure continued compliance therewith;

(kk) the operations of the Company and the Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the USA PATRIOT Act, the Bank Secrecy Act of 1970, as amended, the anti-money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency having jurisdiction over the Company (collectively, the “Money Laundering Laws”); and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator or non-governmental authority involving the Company or any of the Subsidiaries with respect to the Money Laundering Laws is pending or, to the Company’s knowledge, threatened;

(ll) none of the Company, any of the Subsidiaries or any of their respective officers or directors or, to the knowledge of the Company, any agent, employee or controlled affiliate of the Company or any of the Subsidiaries is currently subject to or has been subject in the last three (3)

years to any sanctions administered or enforced by the Office of Foreign Assets Control of the U.S. Treasury Department, the United Nations Security Council, the European Union, Her Majesty's Treasury or any other relevant sanctions authority; and the Company will not directly or indirectly use the proceeds of the offering of the Shares contemplated hereby, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other person or entity for the purpose of financing the activities of any person currently subject to any sanctions administered or enforced by such authorities;

(mm) the Company acknowledges that, in accordance with the requirements of the USA PATRIOT Act, the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients;

(nn) no Subsidiary is currently prohibited, directly or indirectly, 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 property or assets to the Company or any other Subsidiary of the Company, except as described in the Registration Statement, the Disclosure Package and the Prospectus;

(oo) the preclinical studies and clinical trials conducted by or, to the Company's knowledge, on behalf of the Company that are described in, or the results of which are referred to in, the Registration Statement, the Disclosure Package and the Prospectus were and, if still pending, are being conducted in all material respects in accordance with applicable local, state and federal laws, rules and regulations, including, but not limited to, the Federal Food, Drug and Cosmetic Act and its applicable implementing regulations; each description of the results of such studies contained in the Registration Statement, the Disclosure Package and the Prospectus is accurate in all material respects and fairly presents the data derived from such studies, and the Company is not aware of any other studies the results of which the Company believes reasonably call into question the study results described or referred to in the Registration Statement, the Disclosure Package and the Prospectus; and except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, neither the Company nor any Subsidiary has received any written notices or other written correspondence from the Food and Drug Administration of the U.S. Department of Health and Human Services or any committee thereof or from any other U.S. or foreign government or drug or medical device regulatory agency having jurisdiction over the Company or any of its properties (collectively, the "Regulatory Agencies") requiring the termination, suspension or material adverse modification of any clinical trials that are described or referred to in the Registration Statement, the Disclosure Package and the Prospectus; and the Company and the Subsidiaries have each operated and currently are in compliance with all applicable rules and regulations of the Regulatory Agencies except where the failure to be in compliance would not be expected reasonably to have a Material Adverse Effect;

(pp) the Company and the Subsidiaries are, and since January 1, 2016 have been, in compliance with all applicable Health Care Laws except where failure to be in compliance would not be expected reasonably to have a Material Adverse Effect. For purposes of this Agreement, "Health Care Laws" means: (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.), and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care related fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the U.S. Civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the Federal False Statements Law (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. §§ 286 and 287, and the health care fraud criminal provisions

under the U.S. Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (42 U.S.C. §§ 1320d et seq.), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the exclusion laws (42 U.S.C. § 1320a-7), the Medicare statute (Title XVIII of the Social Security Act), and the Medicaid statute (Title XIX of the Social Security Act) and the regulations promulgated pursuant to such statutes; (iii) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder; (iv) the U.S. Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), and the regulations promulgated thereunder; and (v) any and all other applicable health care laws and regulation applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, advertising, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development by the Company. Neither the Company nor the Subsidiaries has received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority alleging that any product operation or activity is in material violation of any Health Care Laws, and, to the Company’s knowledge, no such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened. Neither the Company nor the Subsidiaries is a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, none of the Company or its Subsidiaries or any of their respective officers or directors or, to the Company’s knowledge, any of their respective employees has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion. The Company and the Subsidiaries have filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by the Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission), except in each case, as would not reasonably be expected to have a Material Adverse Effect;

(qq) The Company and the 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, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and the Subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all Personal Data (as defined below) that is in the Company’s possession, and sensitive, confidential or regulated data (collectively, the “Confidential Data”)) used in connection with their businesses, and 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. 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 privacy and security of IT Systems and Confidential Data and to the protection of such IT Systems and Confidential Data from unauthorized use, access, misappropriation or modification-“Personal Data” means (i) a natural person’s name, street address, telephone number,

e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) Protected Health Information as defined by HIPAA; (iv) "personal data" as defined by General Data Protection Regulation, and (v) any other piece of information that allows the identification of such natural person;

(rr) the issuance and sale of the Shares as contemplated hereby will not cause any holder of any shares of capital stock, securities convertible into or exchangeable or exercisable for capital stock or options, warrants or other rights to purchase capital stock or any other securities of the Company to have any right to acquire any shares of capital stock of the Company, except as have been otherwise waived;

(ss) the Company has not received any notice from the Nasdaq Global Market regarding the delisting of the Common Stock from the Nasdaq Global Market;

(tt) except pursuant to this Agreement, neither the Company nor any of the Subsidiaries has incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby or by the Registration Statement;

(uu) none of the Company, any of the Subsidiaries or any of their respective directors, officers or affiliates has taken, directly or indirectly, any action designed, or which has constituted or might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares in violation of Regulation M under the Exchange Act;

(vv) to the Company's knowledge, there are no affiliations or associations between (i) any member of FINRA and (ii) the Company or any of the Company's officers, directors or 5% or greater security holders or any beneficial owner of the Company's unregistered equity securities that were acquired at any time on or after the 180th day immediately preceding the date the Registration Statement was initially filed with the Commission, except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus;

(ww) except for matters which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, each "employee benefit plan" (within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA")) for which the Company or any member of its "Controlled Group" (defined as any organization that is a member of a controlled group of corporations within the meaning of Section 414 of the Code, including its subsidiaries, would have liability (each a "Plan") is in compliance in all material respects with all presently applicable statutes, rules and regulations, including ERISA and the Code; (ii) with respect to each Plan subject to Title IV of ERISA (a) no "reportable event" (as defined in Section 4043 of ERISA) has occurred for which the Company or any member of its Controlled Group would have any liability; and (b) neither the Company nor any member of its Controlled Group has incurred or expects to incur liability under Title IV of ERISA (other than for contributions to the Plan or premiums payable to the Pension Benefit Guaranty Corporation, in each case in the ordinary course and without default); (iii) no Plan which is subject to Section 412 of the Code or Section 302 of ERISA has failed to satisfy the minimum funding standard within the meaning of such sections of the Code or ERISA; and (iv) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred,

whether by action or by failure to act, which would reasonably be expected to cause the loss of such qualification;

(xx) Selecta (RUS) Limited Liability Company (i) does not own any Intellectual Property or assets that are material to the Company's business and (ii) does not have any operations that are material to the Company's business or prospects; and

(yy) the Company has timely made all filings required to be made under the Exchange Act.

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

4. Certain Covenants of the Company. The Company hereby agrees:

(a) to furnish such information as may be required and otherwise to cooperate in qualifying the Shares for offering and sale under the securities or blue sky laws of such states or other jurisdictions as you may designate and to maintain such qualifications in effect so long as you may reasonably request for the distribution of the Shares; provided, however, that the Company shall not be required to qualify as a foreign corporation or to consent to the service of process under the laws of any such jurisdiction (except service of process with respect to the offering and sale of the Shares); and to promptly advise you of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for offer or sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose;

(b) to make available to the Underwriters in New York City, as soon as practicable after this Agreement becomes effective, and thereafter from time to time, to furnish to the Underwriters, as many copies of the Prospectus (or of the Prospectus as amended or supplemented if the Company shall have made any amendments or supplements thereto after the effective date of the Registration Statement) as the Underwriters may reasonably request for the purposes contemplated by the Act; in case any Underwriter is required to deliver (whether physically or through compliance with Rule 172 under the Act or any similar rule), in connection with the sale of the Shares, a prospectus after the nine-month period referred to in Section 10(a)(3) of the Act, or after the time a post-effective amendment to the Registration Statement is required pursuant to Item 512(a) of Regulation S-K under the Act, the Company will prepare, at its expense, promptly upon request such amendment or amendments to the Registration Statement and the Prospectus as may be necessary to permit compliance with the requirements of Section 10(a)(3) of the Act or Item 512(a) of Regulation S-K under the Act, as the case may be;

(c) if, at the time this Agreement is executed and delivered, it is necessary or appropriate for a post-effective amendment to the Registration Statement, or a Registration Statement under Rule 462(b) under the Act, to be filed with the Commission and become effective before the Shares may be sold, the Company will use its best efforts to cause such post-effective amendment or such Registration Statement to be promptly filed and become effective, and will pay any applicable fees in accordance with the Act; and the Company will advise you promptly and, if requested by you, will confirm such advice in writing, (i) when such post-effective amendment or such Registration Statement has become effective, and (ii) if Rule 430B under the Act is used, when the Prospectus is filed with the Commission pursuant to Rule 424(b) under the Act (which the Company agrees to file in a timely manner in accordance with such Rules);

(d) for so long as a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) to notify you immediately upon an event that causes the Company to no longer qualify as an EGC;

(e) to advise you promptly, confirming such advice in writing, of any request by the Commission for amendments or supplements to the Registration Statement, any Pre-Pricing Prospectus, the Prospectus or any Permitted Free Writing Prospectus or for additional information with respect thereto, or of notice of institution of proceedings for, or the entry of a stop order, suspending the effectiveness of the Registration Statement and, if the Commission should enter a stop order suspending the effectiveness of the Registration Statement, to use its best efforts to obtain the lifting or removal of such order as soon as possible; to advise you promptly of any proposal to amend or supplement the Registration Statement, any Pre-Pricing Prospectus or the Prospectus, and to provide you and Underwriters' counsel copies of any such documents for review and comment a reasonable amount of time prior to any proposed filing and to file no such amendment or supplement to which the Representative shall reasonably object in writing on a timely basis (unless, in the opinion of the Company's outside counsel, such action is necessary to comply with applicable law);

(f) subject to Section 4(e) hereof, to file promptly all reports and documents and any preliminary or definitive proxy or information statement required to be filed by the Company with the Commission in order to comply with the Exchange Act for so long as a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares; and to provide you, for your review and comment, with a copy of such reports and statements and other documents to be filed by the Company pursuant to Section 13, 14 or 15(d) of the Exchange Act during such period a reasonable amount of time prior to any proposed filing, and to file no such report, statement or document to which you shall have objected in writing; and to promptly notify you of such filing;

(g) to advise the Underwriters promptly of the happening of any event within the period during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, which event could require the making of any change in the Prospectus then being used so that the Prospectus would not include 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 are made, not misleading, and to advise the Underwriters promptly if, during such period, it shall become necessary to amend or supplement the Prospectus to cause the Prospectus to comply with the requirements of the Act, and, in each case, during such time, subject to Section 4(e) hereof, to prepare and furnish, at the Company's expense, to the Underwriters promptly such amendments or supplements to such Prospectus as may be necessary to reflect any such change or to effect such compliance;

(h) to make generally available (within the meaning of Rule 158 under the Act) to its security holders, and, if not available on the Commission's Electronic Data Gathering, Analysis and Retrieval System ("EDGAR"), to deliver to you, an earnings statement of the Company (which will satisfy the provisions of Section 11(a) of the Act) covering a period of twelve months beginning after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act) as soon as is reasonably practicable after the termination of such twelve-month period but in any case not later than the date determined in accordance with the provisions of the last paragraph of Section 11(a) of the Act and Rule 158(c) thereunder;

(i) if requested by you, to furnish to you three copies of the Registration Statement, as



initially filed with the Commission, and of all amendments thereto (including all exhibits thereto and documents incorporated by reference therein) and sufficient copies of the foregoing (other than exhibits) for distribution of a copy to each of the other Underwriters;

(j) if requested by you, to furnish to you as early as practicable prior to the time of purchase and any additional time of purchase, as the case may be, but not later than two business days prior thereto, a copy of the latest available unaudited interim and monthly consolidated financial statements, if any, of the Company and the Subsidiaries which have been read by the Company's independent registered public accountants, as stated in their letter to be furnished pursuant to Section 6(c) hereof, provided, however, that the Company shall not be required to furnish any materials pursuant to this clause if such materials are available via EDGAR;

(k) to apply the net proceeds from the sale of the Shares in the manner set forth under the caption "Use of proceeds" in the Prospectus;

(l) to pay all costs, expenses, fees and taxes in connection with (i) the preparation and filing of the Registration Statement, each Basic Prospectus, each Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus, each Permitted Free Writing Prospectus, if any, and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to the Underwriters and to dealers (including costs of mailing and shipment), (ii) the registration, issue, sale and delivery of the Shares including any stock or transfer taxes and stamp or similar duties payable upon the sale, issuance or delivery of the Shares to the Underwriters, (iii) the producing, word processing and printing of this Agreement, any dealer agreements and any closing documents (including compilations thereof) and the reproduction and printing and furnishing of copies of each thereof to the Underwriters and (except closing documents) to dealers (including costs of mailing and shipment), (iv) the qualification of the Shares for offering and sale under state or foreign laws and the determination of their eligibility for investment under state or foreign law (including the legal fees and filing fees and other disbursements of counsel for the Underwriters) and the printing and furnishing of copies of any blue sky surveys or legal investment surveys to the Underwriters and to dealers, (v) any listing of the Shares on any securities exchange or qualification of the Shares for quotation on the Nasdaq Global Market and any registration thereof under the Exchange Act, (vi) any filing for review of the public offering of the Shares by FINRA, including the legal fees and filing fees and other disbursements of counsel to the Underwriters relating to FINRA matters, (vii) the fees and disbursements of any transfer agent or registrar for the Shares, (viii) the costs and expenses of the Company relating to presentations or meetings undertaken in connection with the marketing of the offering and sale of the Shares to prospective investors and the Underwriters' sales forces, including, without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, travel, lodging and other expenses incurred by the officers of the Company and any such consultants, and one-half of the cost of any aircraft chartered in connection with the road show (the remaining half of the cost to be paid by the Underwriters), (ix) the costs and expenses of qualifying the Shares for inclusion in the book-entry settlement system of the DTC and (x) the performance of the Company's other obligations hereunder; provided that the legal fees and filing fees and other disbursements of counsel payable by the Company pursuant to clauses (iv) and (vi) above shall not exceed \$20,000;

(m) to comply with Rule 433(d) under the Act (without reliance on Rule 164(b) under the Act) and with Rule 433(g) under the Act;

(n) beginning on the date hereof and ending on, and including, the date that is 90 days

after the date of the Prospectus Supplement (the “Lock-Up Period”), without the prior written consent of the Representative, not to (i) issue, sell, offer to sell, announce the intention to sell, contract or agree to sell, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act and the rules and regulations of the Commission promulgated thereunder, with respect to, any Common Stock or any other securities of the Company that are substantially similar to Common Stock, or any securities convertible into or exchangeable or exercisable for, or any warrants or other rights to purchase, the foregoing (collectively, the “Lock-Up Securities”), (ii) file or cause to become effective a registration statement under the Act relating to the offer and sale of any Lock-Up Securities, (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Lock-Up Securities, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (iv) publicly announce an intention to effect any transaction specified in clause (i), (ii) or (iii), except, in each case, for (A) the registration of the offer and sale of the Shares as contemplated by this Agreement, (B) issuances of Common Stock upon the conversion of convertible securities, including preferred stock, the exercise of options or warrants and the vesting of restricted stock outstanding on the date hereof, in each case, as included or described in the Registration Statement, the Disclosure Package or the Prospectus, (C) the issuance of shares of Common Stock or stock options pursuant to employee benefit or equity incentive plans described in the Registration Statement, the Disclosure Package or the Prospectus, (D) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act; provided that such plan does not provide for the transfer of shares of Common Stock during the Lock-Up Period and the establishment of such plan does not require or otherwise result in any public filing or other public announcement of such plan during the Lock-Up Period, (E) the issuance of up to 5% of the outstanding Common Stock (measured as of the date hereof, after giving effect to the automatic conversion of the Company’s preferred stock in connection with the offering of the Shares as described in the Prospectus) in connection with (1) the acquisition or license of the securities, business, property, technologies or other assets of another person or entity, including pursuant to an employee benefit plan assumed by the Company or its subsidiaries in connection with such acquisition or (2) joint ventures, commercial relationships or other strategic transactions, and in the case of each of clauses (1) and (2), the filing of a registration statement with respect thereto, provided that, in the case of clause (E), any recipient of such Common Stock shall execute and deliver to the Representative a lock-up letter substantially in the form of Exhibit A hereto, and (F) the filing of any registration statement on Form S-8 relating to any benefit plans or arrangements disclosed in the Registration Statement, the Disclosure Package or the Prospectus and the issuance of securities registered pursuant thereto;

(o) except as required by applicable law, prior to the time of purchase or any additional time of purchase, as the case may be, to provide you with reasonable advance notice of and an opportunity to comment on any press release and provide you with reasonable advance notice of any press conferences with respect the financial condition, results of operations, business, properties, assets, or liabilities of the Company or any Subsidiary, or the offering of the Shares, and to issue no such press release and to hold no such press conference without your prior written consent, which consent shall not be unreasonably withheld or delayed;

(p) not, at any time at or after the execution of this Agreement during the period when a prospectus relating to the Shares is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with sales of the Shares, to, directly or indirectly, offer or sell any Shares by means of any “prospectus” (within the meaning

of the Act), or use any “prospectus” (within the meaning of the Act) in connection with the offer or sale of the Shares, in each case other than the Prospectus;

(q) not to, and to cause the Subsidiaries not to, take, directly or indirectly, any action designed, or which will constitute, or has constituted, or might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares;

(r) to use its best efforts to cause the Shares to be listed for quotation on the Nasdaq Global Market and to maintain the listing of the Common Stock, including the Shares, on the Nasdaq Global Market;

(s) to maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock;

(t) if, at any time during the period when a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, the Registration Statement shall cease to comply with the requirements of the Act with respect to eligibility for the use of the form on which the Registration Statement was filed with the Commission, to (i) promptly notify you, (ii) promptly file with the Commission a new registration statement under the Act, relating to the Shares, or a post-effective amendment to the Registration Statement, which new registration statement or post-effective amendment shall comply with the requirements of the Act and shall be in a form satisfactory to you, (iii) use its best efforts to cause such new registration statement or post-effective amendment to become effective under the Act as soon as practicable, (iv) promptly notify you of such effectiveness and (v) take all other action necessary or appropriate to permit the public offering and sale of the Shares to continue as contemplated in the Prospectus; all references herein to the Registration Statement shall be deemed to include each such new registration statement or post-effective amendment, if any; and

(u) if the third anniversary of the initial effective date of the Registration Statement (within the meaning of Rule 415(a)(5) under the Act) shall occur at any time during the period when a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, to (i) file with the Commission, prior to such third anniversary, a new registration statement under the Act relating to the Shares, which new registration statement shall comply with the requirements of the Act (including, without limitation, Rule 415(a)(6) under the Act) and shall be in a form satisfactory to you; and (ii) use its best efforts to cause such new registration statement to become effective under the Act as soon as practicable, but in any event within 180 days after such third anniversary and promptly notify you of such effectiveness; the Company shall take all other action necessary or appropriate to permit the public offering and sale of the Shares to continue as contemplated in the Prospectus; all references herein to the Registration Statement shall be deemed to include each such new registration statement, if any.

5. Reimbursement of the Underwriters’ Expenses. If, after the execution and delivery of this Agreement, the Shares are not delivered for any reason other than the default by one or more of the Underwriters in its or their respective obligations hereunder, including pursuant to the fifth paragraph of Section 8 hereof, the Company shall, in addition to paying the amounts described in Section 4(l) hereof, reimburse the Underwriters for all of their out-of-pocket expenses, including the fees and disbursements of their counsel.

6. Conditions of the Underwriters' Obligations. The several obligations of the Underwriters hereunder are subject to the accuracy of the representations and warranties on the part of the Company on the date hereof, and on the date of the closing of the purchase of the Firm Shares or the Additional Shares, as the case may be (each, a "Closing Date"), the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

(a) The Company shall furnish to you on each Closing Date opinions of Latham & Watkins LLP, counsel for the Company, addressed to the Underwriters, and dated the time of purchase or the additional time of purchase, as the case may be, in forms reasonably acceptable to the Representative.

(b) The Company shall furnish to you on each Closing Date an opinion of Wolf, Greenfield & Sacks, P.C., special counsel for the Company with respect to certain patents and proprietary rights, addressed to the Underwriters, and dated the time of purchase or the additional time of purchase, as the case may be, in a form reasonably acceptable to the Representative.

(c) You shall have received from Ernst & Young LLP letters dated, respectively, the date of this Agreement and each Closing Date, and addressed to the Underwriters in the forms satisfactory to the Representative, which letters shall cover, without limitation, the various financial disclosures contained in the Registration Statement, the Disclosure Package and the Prospectus.

(d) You shall have received on each Closing Date the favorable opinion of Cooley LLP, counsel for the Underwriters, dated the time of purchase or the additional time of purchase, as the case may be, in form and substance reasonably satisfactory to the Representative.

(e) No Prospectus or amendment or supplement to the Registration Statement or the Prospectus shall have been filed to which you shall have reasonably objected (as soon as practicable) in writing.

(f) The Registration Statement and any registration statement required to be filed, prior to the sale of the Shares, under the Act pursuant to Rule 462(b) shall have been filed and shall have become effective under the Act. The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) under the Act at or before 5:30 P.M., New York City time, on the second full business day after the date of this Agreement (or such earlier time as may be required under the Act).

(g) At each Closing Date, (i) no stop order with respect to the effectiveness of the Registration Statement shall have been issued under the Act or proceedings initiated under Section 8(d) or 8(e) of the Act; (ii) the Registration Statement (as of the Applicable Time), when taken together with any amendments thereto, shall not contain an untrue statement of a material fact or omit to state a material fact which is required to be stated therein or necessary to make the statements therein not misleading; (iii) none of the Pre-Pricing Prospectuses or the Prospectus, and no amendment or supplement thereto, shall include 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 are made, not misleading; and (iv) the Disclosure Package, and any amendment or supplement thereto, shall not (as of the Applicable Time) include 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

(h) The Company will, on each Closing Date, deliver to you a certificate of its Chief Executive Officer and its Chief Financial Officer, dated such Closing Date, as the case may be, to

the effect that:

(A) He has reviewed the Registration Statement, the Disclosure Package and the Prospectus;

(B) The representations and warranties of the Company in this Agreement are true and correct as if made at and as of such Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date; and

(C) No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale, nor suspending or preventing the use of the Disclosure Package, the Prospectus or any issuer free writing prospectus, has been issued, and no proceeding for that purpose has been instituted or, to the best of their knowledge, is contemplated by the Commission or any state or regulatory body.

(i) The Company will, on the date hereof and on each Closing Date, deliver to you a certificate of its Chief Financial Officer, with respect to certain financial data in the Registration Statement, dated the time of purchase or the additional time of purchase, as the case may be, in the form and substance reasonably satisfactory to the Representative.

(j) You shall have received each of the signed Lock-Up Agreements referred to in Section 3(v) hereof, and each such Lock-Up Agreement shall be in full force and effect.

(k) On or prior to such Closing Date, the Company shall have furnished to you such other documents and certificates as you may reasonably request.

(l) The Common Stock, including the Shares, shall be listed on the Nasdaq Global Market.

(m) FINRA shall not have raised any objection with respect to the fairness or reasonableness of the underwriting, or other arrangements of the transactions, contemplated hereby.

7. Effective Date of Agreement; Termination. This Agreement shall become effective when the parties hereto have executed and delivered this Agreement.

The obligations of the several Underwriters hereunder shall be subject to termination in the sole discretion of the Representative, if (1) subsequent to the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, there has been any change or any development involving a prospective change in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, the effect of which change or development is, in the reasonable judgment of the Representative, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares on the terms and in the manner contemplated in the Registration Statement, the Disclosure Package and the Prospectus or (2) since the time of execution of this Agreement, there shall have occurred: (A) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or the Nasdaq Stock Market; (B) a suspension or material limitation in trading in the Company's securities on the Nasdaq Global Market; (C) a general moratorium on commercial banking activities declared by either federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States or Russia; (D) an outbreak or escalation of hostilities or significant acts of terrorism

involving the United States or Russia or a declaration by the United States or Russia of a national emergency or war; or (E) any other calamity or crisis or any change in financial, political or economic conditions in the United States, Russia or elsewhere, if the effect of any such event specified in clause (D) or (E), in the sole judgment of the Representative, makes it impracticable or inadvisable to proceed with the sale of and payment for the Shares, or (3) since the time of execution of this Agreement, there shall have occurred any downgrading, or any notice or announcement shall have been given or made of: (A) any intended or potential downgrading or (B) any publicly announced watch, surveillance or review in the rating accorded any debt securities of or guaranteed by the Company or any of the Subsidiaries by any “nationally recognized statistical rating organization,” as that term is defined in Rule 436(g)(2) under the Act.

If the Representative elects to terminate this Agreement as provided in this Section 7, the Company and each other Underwriter shall be notified promptly in writing.

If the sale to the Underwriters of the Shares, as contemplated by this Agreement, is not carried out by the Underwriters for any reason permitted under this Agreement, or if such sale is not carried out because the Company shall be unable to comply with any of the terms of this Agreement, the Company shall not be under any obligation or liability under this Agreement (except to the extent provided in Sections 4(l), 5 and 9 hereof), and the Underwriters shall be under no obligation or liability to the Company under this Agreement (except to the extent provided in Section 9 hereof) or to one another hereunder.

8. Increase in Underwriters’ Commitments. Subject to Sections 6 and 7 hereof, if any Underwriter shall default in its obligation to take up and pay for the Firm Shares to be purchased by it hereunder (otherwise than for a failure of a condition set forth in Section 6 hereof or a reason sufficient to justify the termination of this Agreement under the provisions of Section 7 hereof) and if the number of Firm Shares which all Underwriters so defaulting shall have agreed but failed to take up and pay for does not exceed 10% of the total number of Firm Shares, the non-defaulting Underwriters (including the Underwriters, if any, substituted in the manner set forth below) shall take up and pay for (in addition to the aggregate number of Firm Shares they are obligated to purchase pursuant to Section 1 hereof) the number of Firm Shares agreed to be purchased by all such defaulting Underwriters, as hereinafter provided. Such Shares shall be taken up and paid for by such non-defaulting Underwriters in such amount or amounts as you may designate with the consent of each Underwriter so designated or, in the event no such designation is made, such Shares shall be taken up and paid for by all non-defaulting Underwriters pro rata in proportion to the aggregate number of Firm Shares set forth opposite the names of such non-defaulting Underwriters in Schedule A.

Without relieving any defaulting Underwriter from its obligations hereunder, the Company agrees with the non-defaulting Underwriters that it will not sell any Firm Shares hereunder unless all of the Firm Shares are purchased by the Underwriters (or by substituted Underwriters selected by you with the approval of the Company or selected by the Company with your approval).

If a new Underwriter or Underwriters are substituted by the Underwriters or by the Company for a defaulting Underwriter or Underwriters in accordance with the foregoing provision, the Company or you shall have the right to postpone the time of purchase for a period not exceeding five business days in order that any necessary changes in the Registration Statement and the Prospectus and other documents may be effected.

The term “Underwriter” as used in this Agreement shall refer to and include any Underwriter substituted under this Section 8 with like effect as if such substituted Underwriter had originally been named in Schedule A hereto.

If the aggregate number of Firm Shares which the defaulting Underwriter or Underwriters

agreed to purchase exceeds 10% of the total number of Firm Shares which all Underwriters agreed to purchase hereunder, and if neither the non-defaulting Underwriters nor the Company shall make arrangements within the five business day period stated above for the purchase of all the Firm Shares which the defaulting Underwriter or Underwriters agreed to purchase hereunder, this Agreement shall terminate without further act or deed and without any liability on the part of the Company to any Underwriter and without any liability on the part of any non-defaulting Underwriter to the Company. Nothing in this paragraph, and no action taken hereunder, shall relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

9. Indemnity and Contribution.

(a) The Company agrees to indemnify, defend and hold harmless each Underwriter, its partners, directors, officers and members, any person who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and any “affiliate” (within the meaning of Rule 405 under the Act) of such Underwriter, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, any such Underwriter or any such person may incur under the Act, the Exchange Act, common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company) or arises out of or is based upon any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, the Registration Statement or arises out of or is based upon any omission or alleged omission to state a material fact in the Registration Statement in connection with such information, which material fact was not contained in such information and which material fact was required to be stated in such Registration Statement or was necessary to make such information not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact included in any Prospectus (the term Prospectus for the purpose of this Section 9 being deemed to include any Basic Prospectus, any Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus, any marketing materials used by the Company in connection with the offer and sale of the Shares and any amendments or supplements to the foregoing), in any Covered Free Writing Prospectus, in any “issuer information” (as defined in Rule 433 under the Act) of the Company or in any Prospectus together with any combination of one or more of the Covered Free Writing Prospectuses, if any, or arises out of or is based upon any omission or alleged omission 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, except, with respect to such Prospectus, Permitted Free Writing Prospectus or one or more of the foregoing in combination, insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, such Prospectus, Permitted Free Writing Prospectus or one or more of the foregoing in combination or arises out of or is based upon any omission or alleged omission to state a material fact in such Prospectus, Permitted Free Writing Prospectus or one or more of the foregoing in combination in connection with such information, which material fact was not contained in such information and which material fact was necessary in order to make the statements in such information, in light of the circumstances under which they were made, not

misleading, and will reimburse each “indemnified party” (defined below) for any legal or other fees or expenses reasonably incurred by such indemnified party in connection with investigating or defending against any loss, damage, expense, liability, claim, action, litigation, investigation or proceeding whatsoever (whether or not such indemnified party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to the above as such fees and expenses are incurred.

(b) Each Underwriter severally agrees to indemnify, defend and hold harmless the Company, its directors, its officers who signed the Registration Statement, and any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, the Company or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company), or arises out of or is based upon any omission or alleged omission to state a material fact in such Registration Statement in connection with such information, which material fact was not contained in such information and which material fact was required to be stated in such Registration Statement or was necessary to make such information not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through you to the Company expressly for use in, a Prospectus, Permitted Free Writing Prospectus or one or more of the foregoing in combination, or arises out of or is based upon any omission or alleged omission to state a material fact in such Prospectus, Permitted Free Writing Prospectus or one or more of the foregoing in combination in connection with such information, which material fact was not contained in such information and which material fact was necessary in order to make the statements in such information, in light of the circumstances under which they were made, not misleading.

(c) If any action, suit or proceeding (each, a “Proceeding”) is brought against a person (an “indemnified party”) in respect of which indemnity may be sought against the Company or an Underwriter (as applicable, the “indemnifying party”) pursuant to subsection (a) or (b), respectively, of this Section 9, such indemnified party shall promptly notify such indemnifying party in writing of the institution of such Proceeding and such indemnifying party shall assume the defense of such Proceeding, including the retention of counsel reasonably satisfactory to such indemnified party, and pay all reasonable legal or other fees and expenses related to such Proceeding or incurred in connection with such indemnified party’s enforcement of subsection (a) or (b) of this Section 9; provided, however, that the omission to so notify such indemnifying party shall not relieve such indemnifying party from any liability that such indemnifying party may have to any indemnified party or otherwise except to the extent of any prejudice caused to the indemnifying party by any omission or delay to notify. The indemnified party or parties shall have the right to retain its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless (i) the retention of such counsel shall have been authorized in writing by the indemnifying party in connection with the defense of such Proceeding, (ii) the indemnifying party shall not have, within a reasonable period of time in light of the circumstances, retained counsel to defend such Proceeding or (iii) such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them that are different from, additional to or in conflict



with those available to such indemnifying party (in which case such indemnifying party shall not have the right to direct the defense of such Proceeding on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by such indemnifying party and paid as incurred (it being understood, however, that such indemnifying party shall not be liable for the fees or expenses of more than one separate counsel (in addition to any local counsel) in any one Proceeding or series of related Proceedings in the same jurisdiction representing the indemnified parties who are parties to such Proceeding). The indemnifying party shall not be liable for any settlement of any Proceeding effected without its written consent but, if settled with its written consent, such indemnifying party agrees to indemnify and hold harmless the indemnified party or parties from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second sentence of this Section 9(c), then the indemnifying party agrees that it shall be liable for any settlement of any Proceeding effected without its written consent if (i) such settlement is entered into more than 60 business days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall not have fully reimbursed the indemnified party in accordance with such request prior to the date of such settlement and (iii) such indemnified party shall have given the indemnifying party at least 45 days' prior notice of its intention to settle. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened Proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such Proceeding and does not include an admission of fault or culpability or a failure to act by or on behalf of such indemnified party.

(d) If the indemnification provided for in this Section 9 is unavailable to an indemnified party under subsections (a) and (b) of this Section 9 or insufficient to hold an indemnified party harmless in respect of any losses, damages, expenses, liabilities or claims referred to therein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, damages, expenses, liabilities or claims (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 hand from the offering of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other in connection with the statements or omissions which resulted in such losses, damages, expenses, liabilities or claims, 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 total proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriters, bear to the aggregate public offering price of the Shares. The relative fault of the Company on the one hand and of the Underwriters on the other shall be determined by reference to, among other things, whether the untrue statement or alleged untrue statement of a material fact or omission or alleged omission 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. The amount paid or payable by a party as a result of the losses, damages, expenses, liabilities and claims referred to in this subsection shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with investigating, preparing to defend or defending any Proceeding.

(e) The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 9 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 subsection (d) above. Notwithstanding the provisions of this Section 9, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by such Underwriter and distributed to the public were offered to the public exceeds the amount of any damage which such Underwriter has otherwise been required to pay by reason of such untrue statement or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 9 are several in proportion to their respective underwriting commitments and not joint.

(f) The indemnity and contribution agreements contained in this Section 9 and the covenants, warranties and representations of the Company contained in this Agreement shall remain in full force and effect regardless of any investigation made by or on behalf of any Underwriter, or any of their respective partners, directors, officers or members or any person (including each partner, officer, director or member of such person) who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, or by or on behalf of the Company, its directors, its officers who signed the Registration Statement or any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and shall survive any termination of this Agreement or the issuance and delivery of the Shares pursuant hereto. The Company and each Underwriter agree promptly to notify each other of the commencement of any Proceeding against it and, in the case of the Company, against any of the Company's officers or directors in connection with the issuance and sale of the Shares, or in connection with the Registration Statement, any Basic Prospectus, any Pre-Pricing Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus.

10. Information Furnished by the Underwriters. The statements set forth in the last paragraph on the cover page of the prospectus, the first paragraph under the caption "Underwriting-Commissions and Discounts" and the second, third and fourth paragraphs under the caption "Underwriting-Short Sales, Stabilizing Transactions and Penalty Bids" in the Prospectus, only insofar as such statements relate to the amount of the selling concession and reallowance and stabilization activities that may be undertaken by the Underwriters, constitute the only information furnished by or on behalf of the Underwriters, as such information is referred to in Sections 3 and 9 hereof.

11. Notices. Except as otherwise herein provided, all statements, requests, notices and agreements shall be in writing or by telegram or facsimile and, if to the Underwriters, shall be sufficient in all respects if delivered or sent to the Representative c/o Stifel, Nicolaus & Company, Incorporated, 787 7th Avenue, 11th Floor, New York, New York 10019, Attention: Syndicate (fax: (212) 271-3678), with a copy, which shall not constitute notice, to Cooley LLP, 1114 Avenue of the Americas, New York, New York 10036, Attention: Josh Kaufman and Daniel Goldberg; and if to the Company, shall be sufficient in all respects if delivered or sent to the Company at the offices of the Company at 480 Arsenal Way, Watertown, Massachusetts, Attention: Carsten Brunn, Ph.D., President and Chief Executive Officer, with a copy, which shall not constitute notice, to Latham & Watkins LLP, 200 Clarendon Street, 27<sup>th</sup> Floor, Boston, Massachusetts 02116, Attention: Peter Handrinis.

12. Governing Law; Construction. This Agreement and any claim, counterclaim or dispute of any kind or nature whatsoever arising out of or in any way relating to this Agreement ("Claim"), directly or

indirectly, shall be governed by, and construed in accordance with, the laws of the State of New York without regard to the conflicts of law principles thereof. The section headings in this Agreement have been inserted as a matter of convenience of reference and are not a part of this Agreement.

13. Submission to Jurisdiction. Except as set forth below, no Claim may be commenced, prosecuted or continued in any court other than the courts of the State of New York located in the City and County of New York or in the United States District Court for the Southern District of New York, which courts shall have jurisdiction over the adjudication of such matters, and the Company consents to the jurisdiction of such courts and personal service with respect thereto. The Company hereby consents to personal jurisdiction, service and venue in any court in which any Claim arising out of or in any way relating to this Agreement is brought by any third party against any Underwriter or any indemnified party. Each Underwriter and the Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) waive all right to trial by jury in any action, proceeding or counterclaim (whether based upon contract, tort or otherwise) in any way arising out of or relating to this Agreement. The Company agrees that a final judgment in any such action, proceeding or counterclaim brought in any such court shall be conclusive and binding upon the Company and may be enforced in any other courts to the jurisdiction of which the Company is or may be subject, by suit upon such judgment.

14. Parties at Interest. This Agreement has been and is made solely for the benefit of the Underwriters and the Company and to the extent provided in Section 9 hereof the controlling persons, partners, directors, officers, members and affiliates referred to in such Section, and their respective successors, assigns, heirs, personal representatives and executors and administrators. No other person, partnership, association or corporation (including a purchaser, as such purchaser, from any of the Underwriters) shall acquire or have any right under or by virtue of this Agreement.

15. No Fiduciary Relationship. The Company hereby acknowledges that the Underwriters are acting solely as underwriters in connection with the purchase and sale of the Company's securities. The Company further acknowledges that the Underwriters are acting pursuant to a contractual relationship created solely by this Agreement entered into on an arm's length basis, and in no event do the parties intend that the Underwriters act or be responsible as a fiduciary to the Company, its management, stockholders or creditors or any other person in connection with any activity that the Underwriters may undertake or have undertaken in furtherance of the purchase and sale of the Company's securities, either before or after the date hereof. The Underwriters hereby expressly disclaim any fiduciary or similar obligations to the Company, either in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions, and the Company hereby confirms its understanding and agreement to that effect. The Company and the Underwriters agree that they are each responsible for making their own independent judgments with respect to any such transactions and that any opinions or views expressed by the Underwriters to the Company regarding such transactions, including, but not limited to, any opinions or views with respect to the price or market for the Company's securities, do not constitute advice or recommendations to the Company. The Company and the Underwriters agree that the Underwriters are acting as principal and not the agent or fiduciary of the Company and no Underwriter has assumed, and none of them will assume, any advisory responsibility in favor of the Company with respect to the transactions contemplated hereby or the process leading thereto (irrespective of whether any Underwriter has advised or is currently advising the Company on other matters). The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any breach or alleged breach of any fiduciary, advisory or similar duty to the Company in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions.

16. Counterparts. This Agreement may be signed by the parties in one or more counterparts which together shall constitute one and the same agreement among the parties.

17. Successors and Assigns. This Agreement shall be binding upon the Underwriters and the Company and their successors and assigns and any successor or assign of any substantial portion of the Company's and any of the Underwriters' respective businesses or assets.

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

If the foregoing correctly sets forth the understanding between the Company and the several Underwriters, please so indicate in the space provided below for that purpose, whereupon this Agreement and your acceptance shall constitute a binding agreement between the Company and the Underwriters, severally.

Very truly yours,

SELECTA BIOSCIENCES, INC.

By: /s/ Carsten Brunn, Ph.D.

Name: Carsten Brunn, Ph.D.

Title: President and Chief Executive Officer

Accepted and agreed to as of the date  
first above written, on behalf of itself  
and the other several Underwriters  
named in Schedule A

STIFEL, NICOLAUS & COMPANY, INCORPORATED

By: /s/ Nathan Thompson

\_\_\_\_\_  
Name: Nathan Thompson

Title: Director

**SCHEDULE A**

<u>Underwriter</u>	<u>Number of Firm Shares</u>
STIFEL, NICOLAUS & COMPANY, INCORPORATED.....	11,000,000
CANACCORD GENUITY, LLC.....	3,750,000
NEEDHAM & COMPANY, LLC.....	3,750,000
JANNEY MONTGOMERY SCOTT, LLC.....	1,500,000
Total.....	<u><u>20,000,000</u></u>

**SCHEDULE B**

Permitted Free Writing Prospectuses

None

Pricing Information Provided Orally by Underwriters

Price per share to the public: \$1.50

Number of Shares Offered: 20,000,000



## EXHIBIT A

### Form of Lock-Up Agreement

, 2019

Stifel, Nicolaus & Company, Incorporated  
787 7<sup>th</sup> Avenue, 11<sup>th</sup> Floor  
New York, New York 10019

Together with the other Underwriters  
named in Schedule A to the Underwriting Agreement  
referred to herein

Ladies and Gentlemen:

This Lock-Up Agreement is being delivered to you in connection with the underwriting agreement (the "Underwriting Agreement") to be entered into by Selecta Biosciences, Inc., a Delaware corporation (the "Company"), and you and the other underwriters named in Schedule A to the Underwriting Agreement (the "Underwriters"), with respect to the proposed public offering (the "Offering") of common stock, par value \$0.0001 per share, of the Company (the "Common Stock").

In order to induce you to enter into the Underwriting Agreement, the undersigned agrees that, for a period (the "Lock-Up Period") beginning on the date hereof and ending on, and including, the date that is 90 days after the date of the final prospectus supplement relating to the Offering (the "Prospectus"), the undersigned will not, without the prior written consent of Stifel, Nicolaus & Company, Incorporated (the "Representative"), (i) sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the U.S. Securities and Exchange Commission (the "Commission") promulgated thereunder (the "Exchange Act") with respect to, any Common Stock or any other securities of the Company that are substantially similar to Common Stock, or any securities convertible into or exchangeable or exercisable for, or any warrants or other rights to purchase, the foregoing (collectively, "Locked-Up Securities"), (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Common Stock or any other securities of the Company that are substantially similar to Common Stock, or any securities convertible into or exchangeable or exercisable for, or any warrants or other rights to purchase, the foregoing, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (iii) publicly announce an intention to effect any transaction specified in clause (i) or (ii).

Notwithstanding the foregoing, the foregoing restrictions shall not apply to the undersigned's transfer of Locked-Up Securities:

- (a) acquired in the Offering (other than any issuer directed shares of Common Stock purchased in the Offering by an officer or director of the Company) or in open market transactions after the completion of the Offering, *provided* that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of Locked-Up Securities acquired in the Offering or such open market transactions,

- (b) as a bona fide gift or gifts or for bona fide estate planning purposes, *provided* that the transferee agrees to be bound in writing by the restrictions set forth herein,
- (c) to any member of the immediate family of the undersigned or any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, in a transaction not involving a disposition for value, *provided* that the transferee agrees to be bound in writing by the restrictions set forth herein,
- (d) if the undersigned is an entity, (1) to another corporation, member, partner, trust or other business entity that is a direct or indirect affiliate (as defined under Rule 12b-2 of the Exchange Act) or (2) as part of a distribution, transfer or distribution by the undersigned to its stockholders, members, partners, beneficiaries (or the estates thereof) or other equity holders, *provided* that, in the case of (1) or (2) above, that the transferee agrees to be bound in writing by the restrictions set forth herein,
- (e) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned upon the death of the undersigned, *provided* that the transferee agrees to be bound in writing by the restrictions set forth herein,
- (f) to the Company, or the withholding of shares of Common Stock by the Company, upon the vesting or exercise of an option or other award granted under an equity incentive plan or stock purchase plan of the Company described in the Prospectus or the conversion or exercise of a convertible security or warrant of the Company described in the Prospectus (in each case, by way of “net” exercise in accordance with their terms, and/or to cover withholding tax obligations in connection with such exercise), *provided* that any such Common Stock received upon such vesting, exercise or conversion shall be subject to the terms of this agreement and if the undersigned is required to make a filing under the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock during the Lock-Up Period, the undersigned shall include a statement in such report to the effect that the purpose of such transfer was in connection with a “net exercise” or to cover tax obligations of the undersigned, as applicable, in connection with such transfer,
- (g) to the Company pursuant to any contractual arrangement in effect on the date of the Prospectus that provides for the repurchase of the undersigned’s Common Stock or such other securities by the Company or in connection with the termination of the undersigned’s employment with the Company, *provided* that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made during the Lock-Up Period in connection with any such transfers or dispositions (other than any Form 4 or Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting with respect to the Company under the Exchange Act, and indicating by footnote disclosure or otherwise the nature of the transfer or disposition),
- (h) in connection with the conversion of any convertible security into, or the exercise of any option or warrant for, shares of Common Stock in a manner consistent with the description of such securities contained in the Prospectus, *provided* that any such shares of Common Stock received shall be subject to the terms of this agreement,
- (i) to a charitable organization or educational institution, *provided* that the transferee agrees to be

bound in writing by the restrictions set forth herein, such transfer shall not involve a disposition for value and no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall be required or shall be voluntarily made during the Lock-Up Period (other than a Form 5 within the 45-day period following the end of the Company's fiscal year),

- (j) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (a) through (i) above,
- (k) by operation of law, including pursuant to orders of a court or regulatory agency, a domestic order or negotiated divorce settlement, or
- (l) pursuant to a bona fide third-party tender offer for all outstanding shares of the Company, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a change of control of the Company (including, without limitation, the entering into of any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of shares of Common Stock or other such securities in connection with such transaction, or vote any shares of Common Stock or other securities in favor of any such transaction), *provided* that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this agreement, or
- (m) pursuant to a written plan meeting the requirements of Rule 10b5-1 (a "10b5-1 Plan") under the Exchange Act adopted prior to the date hereof, which trading plan shall not be amended during the Lock-Up Period but may be terminated during the Lock-Up Period.

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

Furthermore, nothing in this agreement shall be deemed to prevent the undersigned from establishing a 10b5-1 Plan for the transfer of shares of Common Stock, provided that (i) such plan does not provide for the transfer of Common Stock during the Lock-Up Period and (ii) no public disclosure of any such action shall be required or shall be voluntarily made by any person until expiration of the Lock-Up Period.

In addition, the undersigned hereby waives any rights the undersigned may have to require registration of Common Stock in connection with the filing of a registration statement relating to the Offering. The undersigned further agrees that, for the Lock-Up Period, the undersigned will not, without the prior written consent of the Representative, make any demand for, or exercise any right with respect to, the registration of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, or warrants or other rights to purchase Common Stock or any such securities. In addition, the undersigned hereby waives any and all preemptive rights, participation rights, resale rights, rights of first refusal and similar rights that the undersigned may have in connection with the Offering or with any issuance or sale by the Company of any equity or other securities before the Offering, except for any such rights as have been heretofore duly exercised.

The undersigned hereby authorizes the Company and its transfer agent, during the Lock-Up Period, to decline the transfer of or to impose stop transfer restrictions on the stock register and other records relating to shares of Common Stock or other securities subject to this Lock-Up Agreement if which the undersigned is the record holder, and, with respect to shares of Common Stock or other securities subject to

this Lock-Up Agreement of which the undersigned is the beneficial owner but not the record holder, the undersigned hereby agrees to cause such record holder to authorize the Company and its transfer agent, during the Lock-Up Period, to decline the transfer of or to note stop transfer restrictions on the stock register and other records relating to such shares or other securities, except in the case of a transfer in compliance with this Lock-Up Agreement.

If (i) either the Representative, on the one hand, or the Company, on the other hand, informs the other in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Offering, (ii) for any reason the Underwriting Agreement shall be terminated prior to the “time of purchase” (as defined in the Underwriting Agreement”), or (iii) the Underwriting Agreement is not executed on or before February 28, 2019, then, in each case, this Lock-Up Agreement shall automatically, and without any action on the part of any other party, terminate and be of no further force and effect, and the undersigned shall be automatically released from all obligations hereunder.

Yours very truly,

\_\_\_\_\_  
Name:

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

LATHAM & WATKINS LLP

FIRM / AFFILIATE OFFICES

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

January 24, 2019

Selecta Biosciences, Inc.  
480 Arsenal Way  
Watertown, MA 02472

Re: Registration Statement on Form S-3 (Registration No. 333-219900)

Ladies and Gentlemen:

We have acted as special counsel to Selecta Biosciences, Inc., a Delaware corporation (the “**Company**”), in connection with the proposed issuance of up to 23,000,000 shares (the “**Shares**”) of common stock, \$0.0001 par value per share (the “**Common Stock**”), pursuant to a registration statement on Form S-3 under the Securities Act of 1933, as amended (the “**Act**”), filed with the Securities and Exchange Commission (the “**Commission**”) on August 11, 2017 (Registration No. 333-219900), including the information deemed to be a part of the registration statement pursuant to Rule 430B of the Act (as so filed, the “**Registration Statement**”), a base prospectus dated August 28, 2017 (the “**Base Prospectus**”), a preliminary prospectus supplement dated January 22, 2019 filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the “**Preliminary Prospectus**”), and a prospectus supplement dated January 23, 2019 filed with the Commission pursuant to Rule 424(b) under the Act (together with Base Prospectus, the “**Prospectus**”). The Shares are being sold pursuant to an underwriting agreement dated January 23, 2019, by and between Stifel, Nicolaus & Company, Incorporated, as representative of the several underwriters listed on Schedule A thereto, and the Company (the “**Underwriting Agreement**”). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement, the Preliminary Prospectus or the Prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware, and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Underwriting Agreement, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Company's Form 8-K dated January 23, 2019 and to the reference to our firm in the Prospectus under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP