

ARCA biopharma, Inc.
Form 424B4
June 11, 2015

Prospectus Supplement No. 37 Filed pursuant to Rule 424(b)(4)
Registration No. 333-187508
(to Prospectus dated May 30, 2013)

125,000 Shares of Series A Convertible Preferred Stock

12,500,000 Shares of Common Stock Underlying the Preferred Stock

Warrants to Purchase up to 6,250,000 Shares of Common Stock and

6,250,000 Shares of Common Stock Underlying the Warrants

ARCA biopharma, Inc.

This prospectus supplement supplements the prospectus dated May 30, 2013 (the “Prospectus”), as supplemented by that certain Prospectus Supplement No. 1 dated July 17, 2013 (“Supplement No. 1”), by that certain Prospectus Supplement No. 2 dated July 19, 2013 (“Supplement No. 2”), by that certain Prospectus Supplement No. 3 dated July 24, 2013 (“Supplement No. 3”), by that certain Prospectus Supplement No. 4 dated July 30, 2013 (“Supplement No. 4”), by that certain Prospectus Supplement No. 5 dated August 6, 2013 (“Supplement No. 5”), by that certain Prospectus Supplement No. 6 dated September 4, 2013 (“Supplement No. 6”), by that certain Prospectus Supplement No. 7 dated September 23, 2013 (“Supplement No. 7”), by that certain Prospectus Supplement No. 8 dated October 29, 2013 (“Supplement No. 8”), by that certain Prospectus Supplement No. 9 dated November 6, 2013 (“Supplement No. 9”), by that certain Prospectus Supplement No. 10 dated November 13, 2013 (“Supplement No. 10”), by that certain Prospectus Supplement No. 11 dated November 21, 2013 (“Supplement No. 11”), by that certain Prospectus Supplement No. 12 dated December 5, 2013 (“Supplement No. 12”), by that certain Prospectus Supplement No. 13 dated January 8, 2014 (“Supplement No. 13”), by that certain Prospectus Supplement No. 14 dated February 10, 2014 (“Supplement No. 14”), by that certain Prospectus Supplement No. 15 dated February 12, 2014 (“Supplement No. 15”), by that certain Prospectus Supplement No. 16 dated February 18, 2014 (“Supplement No. 16”), by that certain Prospectus Supplement No. 17 dated March 3, 2014 (“Supplement No. 17”), by that certain Prospectus Supplement No. 18 dated March 20, 2014 (“Supplement No. 18”), by that certain Prospectus Supplement No. 19 dated May 13, 2014 (“Supplement No. 19”), by that certain Prospectus Supplement No. 20 dated June 9, 2014 (“Supplement No. 20”), by that certain Prospectus Supplement No. 21 dated August 13, 2014 (“Supplement No. 21”), by that certain Prospectus Supplement No. 22 dated

August 18, 2014 (“Supplement No. 22”), by that certain Prospectus Supplement No. 23 dated November 12, 2014 (“Supplement No. 23”), by that certain Prospectus Supplement No. 24 dated December 1, 2014 (“Supplement No. 24”), by that certain Prospectus Supplement No. 25 dated December 10, 2014 (“Supplement No. 25”), by that certain Prospectus Supplement No. 26 dated December 11, 2014 (“Supplement No. 26”), by that certain Prospectus Supplement No. 27 dated December 30, 2014 (“Supplement No. 27”), by that certain Prospectus Supplement No. 28 dated February 4, 2015 (“Supplement No. 28”), by that certain Prospectus Supplement No. 29 dated February 17, 2015 (“Supplement No. 29”), by that certain Prospectus Supplement No. 30 dated February 23, 2015 (“Supplement No. 30”), by that certain Prospectus Supplement No. 31 dated March 16, 2015 (“Supplement No. 31”), by that certain Prospectus Supplement No. 32 dated March 19, 2015 (“Supplement No. 32”), by that certain Prospectus Supplement No. 33 dated April 13, 2015 (“Supplement No. 33”), by that certain Prospectus Supplement No. 34 dated April 14, 2015 (“Supplement No. 34”), by that certain Prospectus Supplement No. 35 dated May 12, 2015 (“Supplement No. 35”), and by that certain Prospectus Supplement No. 36 dated June 5, 2015 (“Supplement No. 36, and together with Supplement No. 1, Supplement No. 2, Supplement No. 3, Supplement No. 4, Supplement No. 5, Supplement No. 6, Supplement No. 7, Supplement No. 8, Supplement No. 9, Supplement No. 10, Supplement No. 11, Supplement No. 12, Supplement No. 13, Supplement No. 14, Supplement No. 15, Supplement No. 16, Supplement No. 17, Supplement No. 18, Supplement No. 19, Supplement No. 20, Supplement No. 21, Supplement No. 22, Supplement No. 23, Supplement No. 24, Supplement No. 25, Supplement No. 26, Supplement No. 27, Supplement No. 28, Supplement No. 29, Supplement No. 30, Supplement No. 31, Supplement No. 32, Supplement No. 33, Supplement No. 34, Supplement No. 35, and Supplement No. 36 (the “Supplements”), which form a part of our Registration Statement on Form S-1 (Registration No. 333-187508). This prospectus supplement is being filed to update and supplement the information in the Prospectus and the Supplements with the information contained in our Current Report on Form 8-K/A, filed with the Securities and Exchange Commission (the “Commission”) on June 11, 2015 (the “Amended Current Report”). Accordingly, we have attached the Amended Current Report to this prospectus supplement.

The Prospectus, the Supplements and this prospectus supplement relate to the offer and sale of up to 125,000 shares of Series A Convertible Preferred Stock (“Preferred Stock”) which are convertible into 12,500,000 shares of Common Stock, warrants to purchase up to 6,250,000 shares of our Common Stock and 6,250,000 shares of Common Stock underlying the warrants.

This prospectus supplement should be read in conjunction with the Prospectus and the Supplements. This prospectus supplement updates and supplements the information in the Prospectus and the Supplements. If there is any inconsistency between the information in the Prospectus, the Supplements and this prospectus supplement, you should rely on the information in this prospectus supplement.

Our common stock is traded on the Nasdaq Global Market under the trading symbol "ABIO." On June 11, 2015, the last reported sale price of our common stock was, rounded to the nearest penny, \$0.89 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 5 of the Prospectus and beginning on page 22 of our quarterly report on Form 10-Q for the period ended March 31, 2015 before you decide whether to invest in shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 11, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K/A

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the

Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 11, 2015 (June 10, 2015)

ARCA biopharma, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware 000-22873 36-3855489
(State or Other Jurisdiction (Commission File Number) (I.R.S. Employer

of Incorporation) Identification No.)

11080 CirclePoint Road, Suite 140, Westminster, CO 80020

(Address of Principal Executive Offices) (Zip Code)

(720) 940-2200

(Registrant's telephone number, including area code)

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

£ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

£ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

£ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

£ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

EXPLANATORY NOTE

This Current Report on Form 8-K/A (this “Amendment”) is being filed as an amendment to the Current Report on Form 8-K filed by ARCA biopharma, Inc. on June 11, 2015 (the “Original Report”) with the U.S. Securities and Exchange Commission. The sole purpose of this Amendment is to furnish amended Exhibit 10.1. Accordingly, this Amendment consists only of the facing page, this explanatory note, the Exhibit Index disclosed in Item 9.01 and Exhibit 10.1.

Section 9 — Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
10.1	Securities Purchase Agreement by and among the Company and the purchasers identified therein, dated June 10, 2015

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.

Dated: June 11, 2015

ARCA biopharma, Inc.
(Registrant)

By: /s/ Brian L. Selby
Name: Brian L. Selby
Title: VP, Finance and Chief Accounting Officer

INDEX TO EXHIBITS

Exhibit Number	Description
10.1	Securities Purchase Agreement by and among the Company and the purchasers identified therein, dated June 10, 2015

Exhibit 10.1

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (this “Agreement”), dated as of June 10, 2015, is made by and among ARCA biopharma, INC., a Delaware corporation (the “Company”), and the Purchasers, severally and not jointly, listed on Exhibit A hereto, together with their permitted transferees (each, a “Purchaser” and collectively, the “Purchasers”).

RECITALS:

A. The Company and the Purchasers are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act.

B. The Purchasers desire to purchase and the Company desires to sell, upon the terms and conditions stated in this Agreement, up to a maximum of \$37,000,000 of Common Stock and warrants to purchase Common Stock of the Company.

C. The capitalized terms used herein and not otherwise defined have the meanings given to them in Article 7.

AGREEMENT

In consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Purchasers (severally and not jointly) hereby agree as follows:

ARTICLE 1

PURCHASE AND SALE OF SECURITIES

1.1 Purchase and Sale of Securities. At the Closing, the Company will issue and sell to each Purchaser, and each Purchaser will, severally and not jointly, purchase from the Company the number of shares of Common Stock (the “Shares”) and the number of warrants to purchase shares of Common Stock (the “Warrants”) as set forth opposite such Purchaser’s name on the Schedule of Purchasers set forth on Exhibit A hereto (the Shares and Warrants referred to collectively as the “Securities”). The purchase price for each Security shall be \$0.8805 (the “Purchase Price”), which is the sum of (i) \$0.8305 (the “Stock Purchase Price”), the consolidated closing bid price of the Common Stock as reported on Nasdaq (symbol “ABIO”) on the date of this Agreement, and (ii) \$0.05. For each one Share purchased by a Purchaser, such Purchaser shall receive a Warrant to purchase 0.4 of a share of Common Stock at an exercise price per share equal to \$0.8716, which represents 120% of the Stock Purchase Price minus \$0.125 (subject to adjustments as provided in the Warrant) pursuant to a warrant substantially in the forms attached as Exhibit B-1 and B-2 hereto.

1.2 Payment. At the Closing, each Purchaser will pay the aggregate Purchase Price set forth opposite its name on Exhibit A hereto by wire transfer of immediately available funds in accordance with wire instructions provided by the Company to the Purchasers prior to the Closing.

1.3 Closing Date. The closing of the transaction contemplated by this Agreement will take place on June 16, 2015 (the “Closing Date”) and the closing (the “Closing”) will be held at the offices of Cooley LLP, 380 Interlocken Crescent, Suite 900, Broomfield, CO 80021, or at such other time and place as shall be agreed upon by the Company and the Purchasers holding a majority in interest of the Securities.

1.4 Issuance of Securities at the Closing. The Company will instruct its transfer agent to credit each Purchaser the number of Shares set forth on the Schedule of Purchasers on Exhibit A (and, upon request, will deliver stock certificates to the Purchasers representing the Shares). At the Closing, the Company shall issue or deliver to each Purchaser (a) evidence of a book entry position evidencing the Shares purchased by such Purchaser hereunder, registered in the name of such Purchaser, or in such nominee name(s) as designated by such Purchaser, representing the number of Shares to be purchased by such Purchaser at such Closing as set forth in the Schedule of Purchasers on Exhibit A hereto against payment of the purchase price for such Shares and (b) a Warrant registered in the name of such Purchaser, or in such nominee name(s) as designated by such Purchaser, representing the number of Underlying Shares as set forth in the Schedule of Purchasers on Exhibit A hereto. The name(s) in which the shares and Warrant are to be issued to each Purchaser are set forth in the Schedule of Purchasers.

ARTICLE 2

REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as specifically contemplated by this Agreement, the Company hereby represents and warrants to the Purchasers that:

2.1 Organization and Qualification. The Company is duly incorporated, validly existing and in good standing under the laws of the State of Delaware, with full corporate power and authority to conduct its business as currently conducted as disclosed in the SEC Documents. The Company is duly qualified to do business and is in good standing in every jurisdiction in which the nature of the business conducted by it or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, would not reasonably be expected to have a Material Adverse Effect.

2.2 Authorization; Enforcement. The Company has all requisite corporate power and authority to enter into and to perform its obligations under this Agreement, to consummate the transactions contemplated hereby and to issue the Securities in accordance with the terms hereof. The execution, delivery and performance of this Agreement by the Company and the consummation by it of the transactions contemplated hereby (including the issuance of the Securities) have been duly authorized by the Company's board of directors and no further consent or authorization of the Company, its board of directors, or its stockholders is required. This Agreement and the Warrant has been (or upon delivery will have been) duly executed by the Company and constitutes a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, or moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity and except as rights to indemnity and contribution may be limited by state or federal securities laws or public policy underlying such laws.

2.3 Capitalization. The authorized capital stock of the Company, as of June 10, 2015, consisted of 100,000,000 shares of Common Stock, of which 21,198,411 shares were issued and outstanding and 5,000,000 shares of blank check Preferred Stock, none of which are currently designated. All of the issued and outstanding shares of Common Stock have been duly authorized, validly issued, fully paid, and nonassessable. As of June 10, 2015, options to purchase an aggregate of 1,205,295 shares of Common Stock and restricted stock units with respect to an aggregate of 635,424 shares of Common Stock were outstanding. Except as disclosed in or contemplated by the SEC Documents, the Company does not have outstanding any options to purchase, or any preemptive rights or other rights to subscribe for or to purchase, any securities or obligations convertible into, or any contracts or commitments to issue or sell, shares of its capital stock or any such options, rights, convertible securities or obligations other than options and restricted stock units granted under the Company's stock option plans. There are no bonds, debentures, notes or other indebtedness having general voting rights (or convertible into securities having such rights) ("Voting Debt") of the Company issued and outstanding. The issuance and sale of the Shares and Warrants will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the Company's knowledge, between or among any of the Company's stockholders except as disclosed in SEC documents. The Company's Amended and Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), as in effect on the date hereof, and the Company's Second Amended and Restated Bylaws, as amended (the "Bylaws"), as in effect on the date hereof, are each filed as exhibits to the SEC Documents.

2.4 Issuance of Securities. The Shares and all of the shares of Common Stock issuable upon exercise of the Warrants (the "Exercise Shares") are duly authorized and, upon issuance in accordance with the terms of this Agreement (and in case of the Exercise Shares, the Warrants), will be validly issued, fully paid and non-assessable and will not be subject to preemptive rights or other similar rights of stockholders of the Company. Assuming the accuracy of the representations and warranties of the Purchasers in this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the Securities Act and the Securities will be issued in compliance in all material respects with all applicable federal and state securities laws.

2.5 No Conflicts; Government Consents and Permits.

(a) The execution, delivery and performance of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby (including the issuance of the Securities) will not (i) conflict with or result in a violation of any provision of its Certificate of Incorporation or Bylaws or require the approval of the Company's stockholders, (ii) violate or conflict with, or result in a breach of any provision of, or constitute a default under, any agreement, credit facility, indenture, or instrument to which the Company is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and regulations of any self-regulatory organizations to which the Company or its securities are subject) applicable to the Company, except in the case of clauses (ii) and (iii) only, for such conflicts, breaches, defaults, and violations as would not reasonably be expected to have a Material Adverse Effect.

(b) The Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency or any regulatory or self regulatory agency in order for it to execute, deliver or perform any of its obligations under this Agreement in accordance with the terms hereof, or to issue and sell the Securities in accordance with the terms hereof other

than such as have been made or obtained, and except for the registration of the Shares and Exercise Shares under the Securities Act pursuant to Section 6 hereof, any filings required to be made under federal or state securities laws, and any required filings or notifications regarding the issuance or listing of additional shares with Nasdaq.

(c) The Company has all franchises, permits, licenses, and any similar authority necessary for the conduct of its business as now being conducted by it and as currently proposed to be conducted as disclosed in the SEC Documents, except for such franchise, permit, license or similar authority, the lack of which would not reasonably be expected to have a Material Adverse Effect. The Company has not received any actual notice of any proceeding relating to revocation or modification of any such franchise, permit, license, or similar authority except where such revocation or modification would not reasonably be expected to have a Material Adverse Effect.

2.6 SEC Documents, Financial Statements. The Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC since March 31, 2014, pursuant to the reporting requirements of the Exchange Act (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents (other than exhibits) incorporated by reference therein, being hereinafter referred to herein as the “SEC Documents”). The Company is eligible to register its Common Stock for resale using Form S-3 promulgated under the Securities Act. The Company has delivered to each Purchaser, or each Purchaser has had access to, true and complete copies of the SEC Documents. As of their respective dates, the SEC Documents complied in all material respects with the requirements of the Exchange Act or the Securities Act, as the case may be, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As of their respective dates, the Financial Statements and the related notes complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. The Financial Statements and the related notes have been prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”), consistently applied, during the periods involved (except (i) as may be otherwise indicated in the Financial Statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes, may be condensed or summary statements or may conform to the SEC’s rules and instructions for Reports on Form 10-Q) and fairly present in all material respects the consolidated financial position of the Company as of the dates thereof and the consolidated results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal and recurring year-end audit adjustments). All material agreements that were required to be filed as exhibits to the SEC Documents under Item 601 of Regulation S-K (collectively, the “Material Agreements”) to which the Company or any Subsidiary of the Company is a party, or the property or assets of the Company or any Subsidiary of the Company are subject, have been filed as exhibits to the SEC Documents. All Material Agreements are valid and enforceable against the Company in accordance with their respective terms, except (i) as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors’ and contracting parties’ rights generally, and (ii) as enforceability may be subject to general principles of equity and except as rights to indemnity and contribution may be limited by federal or state securities laws or public policy underlying such laws. The Company is not in breach of or default under any of the Material Agreements, and to the Company’s knowledge, no other party to a Material Agreement is in breach of or default under such Material Agreement, except in each case, for such breaches or defaults as would not reasonably be expected to have a Material Adverse Effect. The Company has not received a notice of termination nor is the Company otherwise aware of any threats to terminate any of the Material Agreements.

2.7 Disclosure Controls and Procedures. Except as disclosed in the SEC Documents, the Company has established and maintains disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) that are effective in all material respects to ensure that material information relating to the Company, including any consolidated Subsidiaries, is made known to its principal executive officer and principal financial officer by others within those entities. The Company’s certifying officers have evaluated the effectiveness of the Company’s disclosure

controls and procedures as of the end of the period covered by the most recently filed quarterly or annual periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed quarterly or annual periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no significant changes in the Company's internal control over financial reporting (as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) or, to the Company's knowledge, in other factors that could significantly affect the Company's internal control over financial reporting.

2.8 Accounting Controls. Except as disclosed in the SEC Documents, the Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company's internal controls over financial reporting are effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP and the Company is not aware of any material weakness in its internal controls over financial

reporting. The Company maintains “disclosure controls and procedures” (as such term is defined in Rule 13a-15(e) under the Exchange Act); such disclosure controls and procedures are effective.

2.9 Sarbanes-Oxley Act. There is and has been no failure on the part of the Company and any of the Company’s directors or officers, in their capacities as such, to comply with any applicable provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith in all material respects, including, without limitation, Section 402 relating to loans.

2.10 Absence of Litigation. As of the date hereof, there is no action, suit, proceeding or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the Company’s knowledge, threatened against the Company that if determined adversely to the Company would reasonably be expected to have a Material Adverse Effect or would reasonably be expected to impair the ability of the Company to perform its obligations under this Agreement. Neither the Company, nor any director or officer thereof, is or has been the subject of any action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty relating to the Company. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the SEC of the Company or any current or former director or officer of the Company. The Company has not received any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act and, to the Company’s knowledge, the SEC has not issued any such order.

2.11 Intellectual Property Rights. The Company owns or possesses, or has a reasonable basis on which it believes it can obtain on reasonable terms, licenses or sufficient rights to use all patents, patent applications, patent rights, inventions, know-how, trade secrets, trademarks, trademark applications, service marks, service names, trade names and copyrights necessary to conduct its business as conducted as of the date hereof and, to its knowledge, as proposed to be conducted as described in the SEC Documents (the “Intellectual Property”). To the Company’s knowledge, the Company has not materially infringed the intellectual property rights of third parties and no third party, to the Company’s knowledge, is materially infringing the Intellectual Property. There is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by a third party that the Company’s business as now conducted infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of another. Except as disclosed in the SEC Documents, there are no material options, licenses or agreements relating to the Intellectual Property, nor is the Company bound by or a party to any material options, licenses or agreements relating to the patents, patent applications, patent rights, inventions, know-how, trade secrets, trademarks, trademark applications, service marks, service names, trade names or copyrights of any other person or entity. There is no material claim or action or proceeding pending or, to the Company’s knowledge, threatened that challenges any of the rights of the Company in or to, or otherwise with respect to, any Intellectual Property.

2.12 Placement Agent. The Company has taken no action that would give rise to any claim by any Person for brokerage commissions, placement agent’s fees or similar payments relating to this Agreement or the transactions contemplated hereby, except for dealings with the Placement Agent, whose commissions and fees will be paid by the Company.

2.13 Investment Company. The Company is not and, after giving effect to the offering and sale of the Securities, will not be an “investment company” as such term is defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”). The Company shall conduct its business in a manner so that it will not become subject to the Investment Company Act.

2.14 No Material Adverse Change. Since March 31, 2015, except as described or referred to in the SEC Documents and except for cash expenditures in the ordinary course of business, there has not been any change in the assets, business, properties, financial condition or results of operations of the Company that would reasonably be expected to

have a Material Adverse Effect. Since March 31, 2015, (i) there has not been any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, (ii) the Company has not sustained any material loss or interference with the Company's business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, (iii) the Company has not incurred any material liabilities except in the ordinary course of business, and (vi) the Company has not altered materially its method of accounting or the manner in which it keeps its accounting books and records.

2.15 The Nasdaq Capital Market. The Common Stock is listed on The Nasdaq Capital Market, and, except as disclosed in the SEC Documents, to the Company's knowledge, there are no proceedings to revoke or suspend such listing or for the listing of the Shares and the Exercise Shares. Except as disclosed in the SEC Documents, the Company is in compliance with the requirements of Nasdaq for continued listing of the Common Stock thereon and any other Nasdaq listing and maintenance requirements.

2.16 Acknowledgment Regarding Purchasers' Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to this Agreement and the transactions contemplated hereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity with respect to the Company) with respect to this Agreement and the transactions contemplated hereby and any advice given by any Purchaser or any of their respective representatives or agents to the Company in connection with this Agreement and the transactions contemplated hereby is merely incidental to such Purchaser's purchase of the Securities. The

Company further represents to each Purchaser that the Company's decision to enter into this Agreement has been based on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

2.17 Accountants. The Company's independent registered public accounting firm is identified in the SEC Reports and such accounting firm is a registered public accounting firm as required by the Exchange Act and are independent public accountants with respect to the Company within the meaning of Sarbanes-Oxley Act of 2002 and the applicable published rules and regulations thereunder.

2.18 Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as the Company believes are prudent and customary for a company (i) in the businesses and location in which the Company is engaged, (ii) with the resources of the Company, and (iii) at a similar stage of development as the Company. All policies of insurance and fidelity or surety bonds insuring the Company or its businesses, assets, employees, officers and directors are in full force and effect. The Company is in compliance with the terms of such policies and instruments in all material respects; and there are no claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause. The Company has not received any written notice that the Company will not be able to renew its existing insurance coverage as and when such coverage expires. The Company believes it will be able to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business.

2.19 Foreign Corrupt Practices. Since June 1, 2010, neither the Company, nor to the Company's knowledge, any director, officer, agent, employee or other Person acting on behalf of the Company has, in the course of its actions for, or on behalf of, the Company (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity, (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds, (iii) violated or is in violation of in any material respect any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee. Neither the Company, nor, to the Company's knowledge, any of its officers, directors, agents, employees or any other person acting on behalf of the Company are the subject of any allegation, voluntary disclosure, investigation, prosecution or other enforcement action related to the FCPA or any other anti-corruption law.

2.20 Private Placement. Neither the Company nor its Subsidiary or any affiliates, nor any person acting on its or their behalf, has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under any circumstances that would require (i) registration of the Securities under the Securities Act or (ii) cause the offering of the Securities pursuant to this Agreement to be integrated with prior offerings by the Company for purposes of any applicable law, regulation or stockholder approval provisions, including, without limitation, under the rules and regulations of Nasdaq. Assuming the accuracy of the representations and warranties of the Purchasers contained in Article 3 hereof, the issuance of the Securities and the Exercise Shares are exempt from registration under the Securities Act. Neither the Company nor any Person acting on its behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D promulgated under the Securities Act) in connection with the offer or sale of the Securities.

2.21 No Registration Rights. No Person has the right to (i) prohibit the Company from filing a Registration Statement or (ii) other than as disclosed in the SEC Documents, require the Company to register any securities for sale under the Securities Act by reason of the filing of a Registration Statement except in the case of clause (ii) for rights which have been properly waived. The granting and performance of the registration rights under this Agreement will not violate or conflict with, or result in a breach of any provision of, or constitute a default under, any agreement, indenture, or instrument to which the Company is a party.

2.22 Taxes. The Company has timely filed (or has obtained an extension of time within which to file) all necessary federal, state and foreign income and franchise tax returns and has paid all taxes shown as due on such tax returns, except where the failure to so file or the failure to so pay would not reasonably be expected to have a Material Adverse Effect. There are no unpaid taxes in any material amount claimed by the taxing authority of any jurisdiction to be due by the Company, and, to the Company's knowledge, there is no basis for any such claim.

2.23 Real and Personal Property. The Company has good and marketable title to, or has valid rights to lease or otherwise use, all items of real and personal property that are material to the business of the Company free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use of such property by the Company or (ii) would not reasonably be expected to have a Material Adverse Effect.

2.24 Application of Takeover Protections. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby will not impose any restriction on any Purchaser, or create in any party (including any current stockholder of the Company) any rights, under any share acquisition, business combination, poison pill (including any distribution under a rights agreement), or other similar anti-takeover provisions under the Company's Certificate of Incorporation or the laws of its state of incorporation.

2.25 No Manipulation of Stock. The Company has not taken, nor will it take, directly or indirectly any action designed to stabilize or manipulate the price of the Common Stock or any security of the Company to facilitate the sale or resale of any of the Shares.

2.26 Related-Party Transactions. Except with respect to the transactions (i) that are not required to be disclosed and (ii) contemplated hereby to the extent an Affiliate of any director purchases Securities hereunder, all transactions that have occurred between or among the Company, on the one hand, and any of its officers or directors, or any Affiliate or Affiliates of any such officer or director, on the other hand, prior to the date hereof have been disclosed in the SEC Documents.

2.27 Use of Proceeds. The Company shall use the net proceeds of the sale of the Securities hereunder for research and development of the Company's product candidates, working capital and general corporate purposes.

2.28 Compliance. The Company: (i) is not in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company), nor has the Company received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived); (ii) is not in violation of any judgment, decree, or order of any court, arbitrator or other governmental authority; or (iii) is not nor has it been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as would not reasonably be expected to result in a Material Adverse Effect.

2.29 No Change in Control. The sale of the Securities will not constitute a corporate transaction, as such term is defined in and, for the purposes of any employment agreement between the Company and any of its executive officers. Further, the sale of the Securities will not (a) constitute a change of control of the Company or any similar transaction under (i) the Company's certificate of incorporation or (ii) the Company's bylaws, (b) constitute a breach or default, or provide the basis for termination, of any Material Agreement, or (c) constitute an event that would accelerate any rights or payment obligations under any Material Agreement.

2.30 FDA Compliance. Except as would not, individually or in the aggregate, result in a Material Adverse Effect or as disclosed described in or referred to in the SEC Documents: (i) the Company is and has been in compliance with statutes, laws, ordinances, rules and regulations applicable to the Company for the ownership, testing, development, manufacture, packaging, processing, use, labeling, storage, or disposal of any product manufactured by or on behalf of the Company (a "Company Product"), including without limitation, the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301, et seq., the Public Health Service Act, 42 U.S.C. § 262, similar laws of other governmental entities and the regulations promulgated pursuant to such laws (collectively, "Applicable Laws"); (ii) the Company possesses all licenses, certificates, approvals, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws and/or for the ownership of its properties or the conduct of its business as it relates to a Company Product and as described in the SEC Documents (collectively, "Authorizations") and such Authorizations are valid and in full force and effect and the Company is not in violation of any term of any such Authorizations; (iii) the Company has not received any written notice of adverse finding, warning letter or other written correspondence or notice from the U.S. Food and Drug Administration (the "FDA") or any other governmental entity alleging or asserting noncompliance with any Applicable Laws or Authorizations relating to a Company Product; (iv) the Company has not received written notice of any ongoing claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental entity or third party alleging that any Company Product, operation or activity related to a Company Product is in violation of any Applicable Laws or Authorizations or has any knowledge that any such governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation

or proceeding, nor, to the Company's knowledge, has there been any noncompliance with or violation of any Applicable Laws by the Company that would reasonably be expected to require the issuance of any such written notice or result in an investigation, corrective action, or enforcement action by the FDA or similar governmental entity with respect to a Company Product; (v) the Company has not received written notice that any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such governmental entity has threatened or is considering such action with respect to a Company Product; and (vi) the Company has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete, correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission) in all material respects. To the Company's knowledge, neither the Company nor any of its directors, officers, employees or agents, has made, or caused the making of, any false statements on, or material omissions from, any other records or documentation prepared or maintained to comply with the requirements of the FDA or any other governmental entity related to a Company Product.

2.31 Compliance in Clinical Trials. The clinical studies and tests conducted by the Company or on behalf of the Company, have been and, if still pending, are being conducted in all material respects pursuant to all Applicable Laws and Authorizations; the descriptions of the results of such clinical studies and tests contained in the SEC Documents are accurate and complete in all material respects and fairly present the data derived from such clinical studies and tests.

2.32 Environmental Laws. The Company (i) is in material compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (“Environmental Laws”), (ii) has received and is in material compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business and (iii) has not received notice of any actual or potential liability under any environmental law, except where such non-compliance with Environmental Laws, failure to receive required permits, licenses or other approvals, or liability would not, individually or in the aggregate, have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business. The Company has not been named as a “potentially responsible party” under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

2.33 Labor. No labor problem or dispute with the employees of the Company exists or, to the knowledge of the Company, is threatened, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers or contractors, that could have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as contemplated in the SEC Documents.

2.34 ERISA. None of the following events has occurred or exists: (i) a failure to fulfill the obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended (“ERISA”), and the regulations and published interpretations thereunder with respect to a Plan that is required to be funded, determined without regard to any waiver of such obligations or extension of any amortization period; (ii) an audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other federal or state governmental agency or any foreign regulatory agency with respect to the employment or compensation of employees by any of the Company that could have a Material Adverse Effect; (iii) any breach of any contractual obligation, or any violation of law or applicable qualification standards, with respect to the employment or compensation of employees by the Company that would reasonably be expected to have a Material Adverse Effect. None of the following events has occurred or is reasonably likely to occur: (i) a material increase in the aggregate amount of contributions required to be made to all Plans in the current fiscal year of the Company compared to the amount of such contributions made in the most recently completed fiscal year of the Company; (ii) a material increase in the “accumulated post-retirement benefit obligations” (within the meaning of Statement of Financial Accounting Standards 106) of the Company compared to the amount of such obligations in the most recently completed fiscal year of the Company; (iii) any event or condition giving rise to a liability under Title IV of ERISA that could have a Material Adverse Effect; or (iv) the filing of a claim by one or more employees or former employees of the Company related to their employment that could have a Material Adverse Effect. For purposes of this paragraph, the term “Plan” means a plan (within the meaning of Section 3(3) of ERISA) subject to Title IV of ERISA with respect to which the Company may have any liability.

ARTICLE 3

PURCHASER’S REPRESENTATIONS AND WARRANTIES

Each Purchaser represents and warrants to the Company, severally and not jointly, with respect to itself and its purchase hereunder, that:

3.1 Investment Purpose. The Purchaser is purchasing the Securities for its own account and not with a present view toward the public sale or distribution thereof and has no intention of selling or distributing any of such Securities or any arrangement or understanding with any other Persons regarding the sale or distribution of such Securities except in accordance with the provisions of Article 7 and except as would not result in a violation of the Securities Act. The Purchaser will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Securities except in accordance with the provisions

of Article 7 or pursuant to and in accordance with the Securities Act.

3.2 Questionnaires. The stock certificate and warrant questionnaire and the registration statement questionnaire submitted by the Purchaser to the Company in connection with its purchase of the Securities were accurate and correct when delivered and are accurate and correct as of the date hereof.

3.3 Reliance on Exemptions. The Purchaser understands that the Securities are being offered and sold to it in reliance upon specific exemptions from the registration requirements of federal and state securities laws and that the Company is relying upon the truth and accuracy of, and the Purchaser's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Purchaser set forth herein in order to determine the availability of such exemptions and the eligibility of the Purchaser to acquire the Securities.

3.4 Information. The Purchaser has been furnished with all relevant materials relating to the business, finances and operations of the Company necessary to make an investment decision, and materials relating to the offer and sale of the Securities, that have been requested by the Purchaser, including, without limitation, the Company's SEC Documents, and the Purchaser has had the opportunity to review the SEC Documents. The Purchaser has been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other investigation conducted by or on behalf of such Purchaser or its representatives or counsel shall modify, amend

or affect such Purchaser's right to rely on the truth, accuracy and completeness of the SEC Documents and the Company's representations and warranties contained in the Agreement.

3.5 Acknowledgement of Risk.

(a) The Purchaser acknowledges and understands that its investment in the Securities involves a significant degree of risk, including, without limitation, that: (i) the Company is a business with limited operating history and requires substantial funds in addition to the proceeds from the sale of the Securities; (ii) an investment in the Company is speculative, and only Purchasers who can afford the loss of their entire investment should consider investing in the Company and the Securities; (iii) the Purchaser may not be able to liquidate its investment; (iv) transferability of the Securities is extremely limited; (v) in the event of a disposition of the Securities, the Purchaser could sustain the loss of its entire investment; and (vi) the Company has not paid any dividends on its Common Stock since inception and does not anticipate the payment of dividends in the foreseeable future. Such risks are more fully set forth in the SEC Documents;

(b) The Purchaser is able to bear the economic risk of holding the Securities for an indefinite period, and has knowledge and experience in financial and business matters such that it is capable of evaluating the risks of the investment in the Securities; and

(c) The Purchaser has, in connection with the Purchaser's decision to purchase Securities, not relied upon any representations or other information (whether oral or written) other than as set forth in the representations and warranties of the Company contained herein and the SEC Documents, and the Purchaser has, with respect to all matters relating to this Agreement and the offer and sale of the Securities, relied solely upon the advice of such Purchaser's own counsel and has not relied upon or consulted counsel to the Placement Agent or counsel to the Company.

(d) The Purchaser is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

3.6 Governmental Review. The Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the Securities or an investment therein.

3.7 Transfer or Resale. The Purchaser understands that:

(a) the Securities have not been and are not being registered under the Securities Act (other than as contemplated in Article 6) or any applicable state securities laws and, consequently, the Purchaser may have to bear the risk of owning the Securities for an indefinite period of time because the Securities may not be transferred unless: (i) the resale of the Securities is registered pursuant to an effective Registration Statement under the Securities Act, as contemplated in Article 6; (ii) the Purchaser has delivered to the Company an opinion of counsel (in form, substance and scope customary for opinions of counsel in comparable transactions) to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from such registration; (iii) the Securities are sold or transferred pursuant to Rule 144; or (iv) the Purchaser is a partnership transferring to its partners or former partners in accordance with partnership interests or a limited liability company transferring to its members or former members in accordance with their interest in the limited liability company;

(b) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the Securities

Act) may require compliance with some other exemption under the Securities Act or the rules and regulations of the SEC thereunder; and

(c) except as set forth in Article 7, neither the Company nor any other Person is under any obligation to register the resale of the Shares or the Exercise Shares under the Securities Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder.

3.8 Legends.

(a) The Purchaser understands that the certificates representing the Securities will bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of the certificates for such Securities):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER APPLICABLE SECURITIES LAWS, OR UNLESS OFFERED, SOLD, PLEDGED, HYPOTHECATED OR TRANSFERRED PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THOSE LAWS. THE COMPANY SHALL BE ENTITLED TO REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED TO THE EXTENT THAT SUCH OPINION IS REQUIRED PURSUANT TO THAT CERTAIN SECURITIES PURCHASE AGREEMENT UNDER WHICH THE SECURITIES WERE ISSUED.

(b) The Company agrees that at such time as such legend is no longer required under this Section, it will, no later than three business days following the delivery by a Purchaser to the Company or the Company's transfer agent of a certificate representing Shares or Exercise Shares, as applicable, and if such Shares are certificated, issued with a restrictive legend, together with such representations and covenants of such Purchaser or such Purchaser's executing broker as the Company may reasonably require in connection therewith, deliver or cause to be delivered to such Purchaser a certificate or book entry position representing such shares that is free from any legend referring to the Securities Act. The Company shall not make any notation on its records or give instructions to any transfer agent of the Company that enlarge the restrictions on transfer set forth in this Section. Certificates for Securities subject to legend removal hereunder shall be transmitted by the transfer agent of the Company to the Purchasers by crediting the account of such Purchaser's prime broker with the Depository Trust Company (the "DTC"). All costs and expenses related to the removal of the legends and the reissuance of any Securities shall be borne by the Company.

(c) Upon request by a Holder, the Company shall promptly cause the restrictive legend set forth in this section above to be removed and the Company shall issue a certificate or book entry position without such restrictive legend or any other restrictive legend to the holder of the applicable shares upon which it is stamped or issue to such holder by electronic delivery with the applicable balance account at the DTC or in physical certificated shares, if appropriate, if (i) such Shares and Exercise Shares are registered for resale under the Securities Act (provided that, if the Purchaser is selling pursuant to the effective registration statement registering the Securities for resale, the Purchaser agrees to only sell such Shares during such time that such registration statement is effective and such Purchaser is not aware or has not been notified by the Company that such registration statement has been withdrawn or suspended, and only as permitted by such registration statement); (ii) such Shares are sold or transferred pursuant to Rule 144 (if the transferor is not an affiliate of the Company); or (iii) such Shares are eligible for sale without compliance with the 90-day volume restrictions pursuant to Rule 144. Subject to receipt of such representations, and covenants as are contemplated hereby, following the earlier of (i) the effective date of the Registration Statement or (ii) Rule 144 becoming available for the resale of the Shares and Exercise Shares, without compliance with the volume restrictions pursuant to Rule 144, the Company shall issue to the Company's transfer agent the instructions with respect to legend removal consistent with this Section. Following the time a legend is no longer required for the Shares or Exercise Shares under this Section 3.8(c), the Company will, no later than three Business Days following the delivery by a Purchaser to the Company or the Company's transfer agent of a legended certificate representing such securities, (A) deliver or cause to be delivered to such Purchaser a certificate or book entry position representing such securities that is free from all restrictive and other legends or (B) at the request of the Purchaser, cause its transfer agent to issue such Shares and/or Exercise Shares without such legends to the holders thereof by electronic delivery at the applicable balance account at the DTC. Certificates for the Shares or Exercise Shares subject to legend removal hereunder may be transmitted by the Company's transfer agent to a Purchaser by crediting the account of the Purchaser's prime broker with DTC as directed by such Purchaser. Any fees (with respect to the transfer agent, the Company's counsel or otherwise) associated with the issuance of such opinion or the removal of such legend shall be borne by the Company.

3.9 Authorization; Enforcement. The Purchaser has the requisite power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The Purchaser has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of the Purchaser enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity and except as rights to indemnity and contribution may be limited by federal or state securities laws or public policy underlying such laws.

3.10 Residency. The Purchaser is a resident of the jurisdiction set forth immediately below such Purchaser's name on the signature pages hereto.

3.11 No Short Sales. Between the time the Purchaser learned about the Offering and the public announcement of the Offering, the Purchaser has not engaged in any short sales or similar transactions with respect to the Common Stock, nor has the Purchaser, directly or indirectly, caused any Person to engage in any short sales or similar transactions with respect to the Common Stock.

3.12 Acknowledgements Regarding Placement Agent. The Purchaser acknowledges that the Placement Agent is acting as the exclusive placement agent on a “best efforts” basis for the Securities being offered hereby and will be compensated by the Company for acting in such capacity. The Purchaser represents that (i) the Purchaser was contacted regarding the sale of the Securities by the Placement Agent (or an authorized agent or representative thereof) with whom the Purchaser entered into a confidentiality agreement and (ii) no Securities were offered or sold to it by means of any form of general solicitation or general advertising.

3.13 “Bad Actor” Matters. The Purchaser hereby represents that no Disqualification Events (as defined below) are applicable to Purchaser or any of its Rule 506(d) Related Parties (as defined below), except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. Purchaser hereby agrees that it shall notify the Company promptly in writing in the event a Disqualification Event becomes applicable to Purchaser or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. For purposes of this Section 3.13, (a) “Disqualification Event” shall mean any of the “bad actor” disqualifications described in Rule 506(d)(1)(i) through (viii) under the

Securities Act and (b) “Rule 506(d) Related Party” shall mean a person or entity that is a beneficial owner of Purchaser’s securities for purposes of Rule 506(d) of the Securities Act.

ARTICLE 4

COVENANTS

4.1 Reporting Status. The Company’s Common Stock is registered under Section 12(g) of the Exchange Act. During the Registration Period, the Company will use commercially reasonable efforts to timely file all documents with the SEC, and the Company will not terminate its status as an issuer required to file reports under the Exchange Act even if the Exchange Act or the rules and regulations thereunder would permit such termination.

4.2 Expenses. The Company and each Purchaser is liable for, and will pay, its own expenses incurred in connection with the negotiation, preparation, execution and delivery of this Agreement, including, without limitation, attorneys’ and consultants’ fees and expenses; provided that at the Closing the Company will reimburse Venrock Healthcare Capital Partners, L.P. (“Venrock”) and Venrock Healthcare Capital Partners II, L.P. for all documented and reasonable consulting, legal and other out of pocket expenses incurred by them related to the consummation of the transactions contemplated by this Agreement up to a maximum of \$50,000.

4.3 Financial Information. The financial statements of the Company to be included in any documents filed with the SEC will be prepared in accordance with U.S. GAAP, consistently applied (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes, may be condensed or summary statements or may conform to the SEC’s rules and instructions for Reports on Form 10-Q), and will fairly present in all material respects the financial position of the Company and results of its operations and cash flows as of, and for the periods covered by, such financial statements (subject, in the case of unaudited statements, to normal and recurring year-end audit adjustments).