

CLEVELAND BIOLABS INC
Form FWP
February 04, 2015

Filed Pursuant to Rule 433 of the Securities Act of 1933, as amended

Issuer Free Writing Prospectus dated February 4, 2015

Registration No. 333-192755

Cleveland BioLabs, Inc.

This free writing prospectus relates only to the securities described below and should be read together with the Registration Statement on Form S-3 (File No. 333-192755). The Registration Statement, can be accessed through the following link:

http://www.sec.gov/Archives/edgar/data/1318641/000117184313004974/fs3_121013.htm

References to Cleveland BioLabs, the Company, we, our, ours, and us are used in the manner described in the Registration Statement.

Form Securities Purchase Agreement

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this Agreement) is dated as of February , 2015, between Cleveland BioLabs, Inc., a Delaware corporation (the Company), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a Purchaser , and collectively, the Purchasers).

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to (i) an effective registration statement under the Securities Act of 1933, as amended (the Securities Act) and (ii) an exemption from the registration requirements of Section 5 of the Securities Act contained in Section 4(a)(2) thereof and/or Regulation D thereunder, the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

ARTICLE I.

DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Certificate of Designation (as defined herein) and the following terms have the meanings set forth in this Section 1.1:

Acquiring Person shall have the meaning ascribed to such term in Section 4.5.

Action shall have the meaning ascribed to such term in Section 3.1(j).

Affiliate means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

Approved Share Plan means any employee benefit plan which has been approved by the board of directors of the Company prior to or subsequent to the date hereof pursuant to which shares of Common Stock and options to purchase Common Stock may be issued to any employee, consultant, officer or director for services provided to the Company in their capacity as such.

Board of Directors means the board of directors of the Company.

Business Day means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

Certificate of Designation means the Certificate of Designation to be filed prior to the Closing by the Company with the Secretary of State of Delaware, in the form of Exhibit F attached hereto

Closing means the closing of the purchase and sale of the Securities pursuant to Section 2.1.

Closing Date means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) the Purchasers' obligations to pay the Subscription Amount and (ii) the Company's obligations to deliver the Securities, in each case, have been satisfied or waived, but in no event later than the third Trading Day following the date hereof.

Commission means the United States Securities and Exchange Commission.

Common Stock means the common stock of the Company, par value \$0.005 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

Common Stock Equivalents means any capital stock or other security of the Company or any of its Subsidiaries that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Stock) or any of its Subsidiaries.

Company Counsel means Cooley LLP, with offices located at 500 Boylston Street, Boston, Massachusetts 02116.

Conversion Price shall have the meaning ascribed to such term in the Certificate of Designation.

Conversion Shares means the shares of Common Stock issuable upon conversion of the Preferred Stock.

Disclosure Schedules means the Disclosure Schedules of the Company delivered concurrently herewith.

EGS means Ellenoff Grossman & Schole LLP, with offices located at 1345 Avenue of the Americas, New York, New York 10105-0302.

Escrow Agent means Signature Bank, a New York State chartered bank, with offices at 261 Madison Avenue, New York, New York 10016.

Escrow Agreement means the escrow agreement entered into on or about the date hereof, by and among the Company, the Escrow Agent and the Placement Agent, pursuant to which the Purchasers shall deposit Subscription Amounts with the Escrow Agent to be applied to the transactions contemplated hereunder.

Evaluation Date shall have the meaning ascribed to such term in Section 3.1(r).

Exchange Act means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

Exempt Issuance means the issuance of (a) shares of Common Stock or options to purchase Common Stock (and shares of Common Stock underlying such options) to directors, officers, employees or consultants (provided that issuances of Common Stock and Common Stock Equivalents to consultants shall not exceed, in the aggregate over any 12 month period, 5% of the then issued and outstanding shares of Common Stock as of the date hereof and provided further that consultants shall not include attorneys, law firms, accountants or accounting firms) of the Company in their capacity as such pursuant to an Approved Share Plan, provided that no issuances under this clause (a) shall occur prior to the Shareholder Approval Date and provided, further, that (1) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such options) after the date hereof pursuant to this clause (A) do not, in the aggregate, exceed more than 7.5% of the Common Stock issued and outstanding immediately prior to the date hereof in any 12 month period (provided that, for purposes of this clause (a)(1), on each 12 month anniversary of the date hereof, the number of issued and outstanding shares shall be reset and such cap of 10% shall be calculated based on such reset number of issued and outstanding shares) and (2) the exercise price of any such options is not lowered, none of such options are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such options are otherwise materially changed in any manner that adversely affects any of the Purchasers, (b) securities upon the exercise of any Securities issued hereunder, (c) shares of Common Stock issued upon the conversion or exercise of Common Stock Equivalents (other than options to purchase Common Stock issued pursuant to an Approved Share Plan that are covered by clause (a) above) issued prior to the date hereof, provided that the conversion or exercise price of any such Common Stock Equivalents (other than options to purchase Common Stock issued pursuant to an Approved Share Plan that are covered by clause (a) above) is not lowered (other than in accordance with the terms of such Common Stock Equivalents and the transaction documents pursuant to which they were issued as they existed on the date hereof), none of such Common Stock Equivalents (other than options to purchase Common Stock issued pursuant to an Approved Share Plan that are covered by clause (a) above) are amended to increase the number of shares issuable thereunder (other than in accordance with the terms of such Common Stock Equivalents and the transaction documents pursuant to which they were issued as they existed on the date hereof) and none of the terms or conditions of any such Common Stock Equivalents (other than options to purchase Common Stock issued pursuant to an Approved Share Plan that are covered by clause (a) above) are otherwise materially changed in any manner that adversely affects any of the Purchasers, or (d) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

FCPA means the Foreign Corrupt Practices Act of 1977, as amended.

FDA shall have the meaning ascribed to such term in Section 3.1(gg).

FDCA shall have the meaning ascribed to such term in Section 3.1(gg).

GAAP shall have the meaning ascribed to such term in Section 3.1(h).

Indebtedness shall have the meaning ascribed to such term in Section 3.1(z).

Intellectual Property Rights shall have the meaning ascribed to such term in Section 3.1(o).

Knowledge of the Company means the actual knowledge that was, or would reasonably be expected to be, obtained after due inquiry of all executive officers of the Company.

Legend Removal Date shall have the meaning ascribed to such term in Section 4.17(c).

Liens means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction that has the practical effect of creating any of the foregoing.

Material Adverse Effect shall have the meaning assigned to such term in Section 3.1(b).

Material Permits shall have the meaning ascribed to such term in Section 3.1(m).

Participation Maximum shall have the meaning ascribed to such term in Section 4.11(a).

Per Share Purchase Price equals \$, subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

Person means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

Pharmaceutical Product shall have the meaning ascribed to such term in Section 3.1(gg).

Placement Agent means Ladenburg Thalmann & Co. Inc.

Preferred Stock means the up to shares of the Company's Series A Convertible Preferred Stock issued hereunder having the rights, preferences and privileges set forth in the Certificate of Designation.

Pre-Notice shall have the meaning ascribed to such term in Section 4.11(b).

Pro Rata Portion shall have the meaning ascribed to such term in Section 4.11(e).

Proceeding means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

Prospectus means the final prospectus filed for the Registration Statement, including the documents incorporated by reference in the Registration Statement, and the documents incorporated by reference in such final prospectus.

Prospectus Supplement means the supplement to the Prospectus complying with Rule 424(b) of the Securities Act that is filed with the Commission and delivered by the Company to each Purchaser at the Closing, including the documents incorporated by reference therein.

Purchaser Party shall have the meaning ascribed to such term in Section 4.8.

Registration Rights Agreement means the Registration Rights Agreement, dated the date hereof, among the Company and the Purchasers, in the form of Exhibit A attached hereto.

Registration Statement means the effective registration statement filed with the Commission (File No. 333-192755), which registers the sale of the Shares, the Series B Prefunded Warrants and the Series B Prefunded Warrant Shares to the Purchasers.

Required Approvals shall have the meaning ascribed to such term in Section 3.1(e).

Resale Registration Statement means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Purchasers of the Series A Warrant Shares and the Conversion Shares.

Rule 144 means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

Rule 424 means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

SEC Reports shall have the meaning ascribed to such term in Section 3.1(h).

Securities means the Shares, the Warrants, the Preferred Stock, the Warrant Shares and the Conversion Shares.

Securities Act means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

Series A Warrants means, collectively, the Common Stock purchase warrants delivered to the Purchasers at Closing in accordance with Section 2.2(a) hereof, which Warrants shall be initially exercisable on the six (6) month anniversary of issuance and have a term of exercise equal to six (6) years from the initial exercise date, in the form of Exhibit C attached hereto.

Series A Warrant Shares means the shares of Common Stock issuable upon exercise of the Series A Warrants.

Series B Prefunded Warrants means the Common Stock purchase warrants delivered to the Purchasers at the Closing in accordance with Section 2.2(a) hereof, which Warrants shall be exercisable immediately for consideration paid at the Closing and shall require no additional consideration at the time of exercise, in the form of Exhibit D attached hereto.

Series B Prefunded Warrant Shares means the shares of Common Stock issuable upon exercise of the Series B Prefunded Warrants.

Shareholder Approval means such approval as may be required by the applicable rules and regulations of the Nasdaq Stock Market (or any successor entity) from the shareholders of the Company with respect to the transactions contemplated by the Transaction Documents, including the issuance of all of the Shares, Series B Prefunded Warrant Shares and Conversion Shares in excess of 19.99% of the issued and outstanding Common Stock on the Closing Date.

Shareholder Approval Date means the date on which Shareholder Approval is obtained and deemed effective.

Shares means the shares of Common Stock issued or issuable to each Purchaser pursuant to this Agreement.

Short Sales means all short sales as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

Stated Value means \$1,000 per share of Preferred Stock

Subscription Amount means, as to each Purchaser, the aggregate amount to be paid for Shares, Warrants and Preferred Stock purchased hereunder as specified below such Purchaser's name on the signature page of this Agreement and next to the heading Subscription Amount, in United States dollars and in immediately available funds, of which a portion equal to _____ % of the Subscription Amount shall apply to the

purchase of Shares hereunder (such portion, the Shares Subscription Amount) and a portion equal to % of the Subscription Amount shall apply to the purchase of Preferred Stock hereunder (such portion, the Preferred Stock Subscription Amount).

Subsequent Financing shall have the meaning ascribed to such term in Section 4.11(a).

Subsequent Financing Notice shall have the meaning ascribed to such term in Section 4.11(b).

Subsidiary means any subsidiary of the Company as set forth on Schedule 3.1(a), and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

Trading Day means a day on which the principal Trading Market is open for trading.

Trading Market means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, the OTCQX, or the OTCQB (or any successors to any of the foregoing).

Transaction Documents means this Agreement, the Warrants, the Certificate of Designation, the Registration Rights Agreement, the Voting Agreement and any other documents or agreements executed in connection with the transactions contemplated hereunder.

Transfer Agent means Continental Stock Transfer & Trust Company, the current transfer agent of the Company, with a mailing address of 17 Battery Place, New York, New York 10004, and a facsimile number of (212) 509-5150, and any successor transfer agent of the Company.

Variable Rate Transaction shall have the meaning ascribed to such term in Section 4.12(b).

Voting Agreement means the written agreement, in the form of Exhibit E attached hereto, of all of the officers, directors and stockholders holding more than 10% of the issued and outstanding shares of Common Stock on the date hereof to vote all Common Stock over which such Persons have voting control as of the record date for the meeting of stockholders of the Company, amounting to, in the aggregate, at least 4.5% of the issued and outstanding Common Stock

VWAP means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m.

(New York City time) to 4:02 p.m. (New York City time)), (b) if the Common Stock is not then listed or quoted for trading on a Trading Market and if prices for the Common Stock are then reported in the Pink Sheets published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (c) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

Warrants means, collectively, the Series A Warrants and the Series B Prefunded Warrants.

Warrant Shares means the shares of Common Stock issuable upon exercise of the Warrants.

ARTICLE II.

PURCHASE AND SALE

2.1 Closing. On the Closing Date, upon the terms and subject to the conditions set forth herein, substantially concurrent with the execution and delivery of this Agreement by the parties hereto, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$ _____ of Shares, Preferred Stock, Series A Warrants and, if applicable, Series B Prefunded Warrants. Notwithstanding anything herein to the contrary, in the event that a Purchaser's Shares Subscription Amount would cause such Purchaser's Beneficial Ownership to exceed 9.99% of the issued and outstanding shares of Common Stock immediately after the issuance of Shares hereunder, in lieu of Shares in excess of such amount, such Purchaser shall be issued a Series B Prefunded Warrant. The aggregate number of shares of Preferred Stock sold hereunder shall be up to _____. Each Purchaser shall deliver to the Escrow Agent, via wire transfer, immediately available funds equal to such Purchaser's Subscription Amount as set forth on the signature page hereto executed by such Purchaser, and the Company shall deliver to each Purchaser its respective Shares, shares of Preferred Stock and a Warrant, and if applicable, a Series B Prefunded Warrant, as determined pursuant to Section 2.2(a), and the Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, the Closing shall occur at the offices of Company Counsel or such other location as the parties shall mutually agree.

2.2 Deliveries.

(a) On or prior to the Closing Date, the Company shall deliver or cause to be delivered to each Purchaser the following:

(i) this Agreement duly executed by the Company;

(ii) a legal opinion of Company Counsel, substantially in the form of Exhibit C attached hereto;

(iii) a copy of the irrevocable instructions to the Transfer Agent instructing the Transfer Agent to deliver on an expedited basis via The Depository Trust Company's Deposit or Withdrawal at Custodian system (DWAC) Shares equal to such Purchaser's Shares Subscription Amount divided by the Per Share Purchase Price, registered in the name of such Purchaser, to the account(s) identified by such Purchaser; provided, however, in no event more than a number of Shares that would otherwise cause such Purchaser's beneficial ownership of the Common Stock to exceed 9.99% of the issued and outstanding shares of Common Stock;

(iv) a Series A Warrant registered in the name of such Purchaser to purchase up to a number of shares of Common Stock equal to 100% of the sum of such Purchaser's Shares, Series B Prefunded Warrant Shares and Conversion Shares on the date hereof, with an initial exercise price equal to \$ _____ per share, subject to adjustment therein (such Series A Warrant certificate may be delivered within three Trading Days of the Closing Date);

(v) if applicable, a Series B Prefunded Warrant registered in the name of such Purchaser to purchase up to a number of shares of Common Stock equal to the difference between (A) such Purchaser's Shares Subscription Amount divided by the Per Share Purchase Price and (B) the number of Shares otherwise issuable to such Purchaser that would cause such Purchaser's beneficial ownership of the Common Stock to exceed 9.99% of the issued and outstanding shares of Common Stock immediately following the issuance of the Shares hereunder (such Series B Prefunded Warrant certificate may be delivered within three Trading Days of the Closing Date);

(vi) a certificate evidencing a number of shares of Preferred Stock equal to such Purchaser's Preferred Stock Subscription Amount divided by the Stated Value, registered in the name of such Purchaser and evidence of the filing and acceptance of the Certificate of Designation from the Secretary of State of Delaware;

(vii) the Voting Agreements;

(viii) the Registration Rights Agreement, duly executed by the Company; and

(ix) the Prospectus and Prospectus Supplement (which may be delivered in accordance with Rule 172 under the Securities Act).

(b) On or prior to the Closing Date, each Purchaser shall deliver or cause to be delivered to the Company or the Escrow Agent, as applicable, the following:

(i) this Agreement duly executed by such Purchaser;

(ii) the Registration Rights Agreement duly executed by such Purchaser; and

(iii) to Escrow Agent, such Purchaser's Subscription Amount by wire transfer to the account specified in the Escrow Agreement.

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects on the Closing Date of the representations and warranties of the Purchasers contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to the Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The respective obligations of the Purchasers hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects when made and on the Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(v) from the date hereof to the Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, has not ended or terminated and in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at the Closing.

ARTICLE III.

REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation, warranty or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to each Purchaser as of the date hereof:

(a) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). Except as set forth on Schedule 3.1(a), the Company owns, directly or indirectly, such percentage of the capital stock or other equity interests of each Subsidiary, as set forth in the SEC Reports, free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary owned by the Company are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation or default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted 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, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a Material Adverse Effect) and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the

Company, the Board of Directors or the Company's stockholders in connection herewith or therewith, other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which the Company is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law and public policy (collectively, the Enforceability Exceptions).

(d) No Conflicts. Except as set forth on Schedule 3.1(d), the execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal, state and foreign securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.4 of this Agreement, (ii) the filings with the Commission of the Prospectus Supplement and Resale Registration Statement, (iii) application(s) to each applicable Trading Market for the listing of the Shares, Warrant Shares and Conversion Shares for trading thereon in the time and manner required thereby, (iv) the filing of Form D with the Commission and such filings as are required to be made under applicable state securities laws and (v) Shareholder Approval (collectively, the Required Approvals).

(f) Issuance of the Securities; Registration. The Shares are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Preferred Stock is duly authorized and, upon filing of the Certificate of Designation with the State of Delaware and the acceptance thereof, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Warrants are duly authorized, and when duly executed and delivered by the Company in accordance with the applicable Transaction Documents, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as limited by the Enforceability Exceptions. The Warrant Shares and Conversion Shares, when issued in accordance with the terms of the Warrants and the Certificate of Designation, respectively, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement and the Warrants. The Company has prepared and filed the Registration Statement in conformity with the requirements of the Securities Act, which became effective on January 10, 2014 (the Effective Date), including the Prospectus, and such amendments and supplements thereto as may have been required to the date of this Agreement. The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of the Prospectus has been issued by the Commission and no proceedings for that purpose have been instituted or, to the knowledge of the Company, are threatened by the Commission. The Company, if required by the rules and regulations of the Commission, shall file the Prospectus Supplement with the Commission pursuant to Rule 424(b). At the time the Registration Statement and any amendments thereto became effective, at the date of this Agreement and at the Closing Date, the Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and as of the date of the Prospectus Supplement and at the Closing Date, the Prospectus Supplement, when taken together with the Prospectus, and any amendments or supplements thereto, when taken together with the Prospectus and Prospectus Supplement and any amendments and supplements thereto prior to such date, conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(g) Capitalization. The capitalization of the Company is as set forth on Schedule 3.1(g), which Schedule 3.1(g) shall also include the number of shares of Common Stock, to the Knowledge of the Company, owned beneficially, and of record, by Affiliates of the Company as of the date hereof. Except as set forth on Schedule 3.1(g), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common

Stock to employees and consultants pursuant to the Company's employee stock incentive plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. Except as set forth on Schedule 3.1(g), no Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as set forth on Schedule 3.1(g) or as a result of the purchase and sale of the Securities, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. Except as set forth on Schedule 3.1(g), the issuance and sale of the Securities 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. All of the outstanding shares of capital stock of the Company are validly issued, fully paid and nonassessable, have been issued in compliance with all applicable federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Other than Shareholder Approval, no further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. Except as set forth on Schedule 3.1(g), 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 Knowledge of the Company, between or among any of the Company's stockholders.

(h) SEC Reports: Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus and the Prospectus Supplement, being collectively referred to herein as the SEC Reports) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, 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 the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to, or identified in, Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports complied in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United

States generally accepted accounting principles applied on a consistent basis during the periods involved (GAAP), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly presented in all material respects the financial position of the Company as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes: Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting (other than in accordance with pronouncements under GAAP), (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3.1(i), no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least one Trading Day prior to the date that this representation is made.

(j) Litigation. There is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the Knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an Action) which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) would, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Except as set forth on Schedule 3.1(j), neither the Company nor any Subsidiary, 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. There has not been, and to the Knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No material labor dispute exists or, to the Knowledge of the Company, is imminent with respect to any of the employees of the Company, which would have or reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Neither the Company nor any Subsidiary: (i) is 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 or any Subsidiary under), nor has the Company or any Subsidiary 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 in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has 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 have or reasonably be expected to result in a Material Adverse Effect.

(m) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (Material Permits), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit, except where such revocation or modification would not reasonably be expected to have a Material Adverse Effect.

(n) Title to Assets. Except as set forth on Schedule 3.1(n), the Company and the Subsidiaries have good and marketable title in fee simple to all real property owned

by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance in all material respects.

(o) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the Intellectual Property Rights). Neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years after the date of this Agreement except as could not have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to result in a Material Adverse Effect. To the Knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(p) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as the Company believes are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost that would have a Material Adverse Effect.

(q) Transactions With Affiliates and Employees. Except as set forth in the SEC Reports and as set forth on Schedule 3.1(q), none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and

directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the Knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary, director compensation or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(r) Sarbanes-Oxley: Internal Accounting Controls. The Company is in compliance, in all material respects, with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company maintains a system of 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 (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and designed such disclosure controls and procedures to provide reasonable assurance that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the Evaluation Date). The Company presented in its most recently filed 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 changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company.

(s) Certain Fees. Except as set forth in the Prospectus Supplement, no brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(t) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an investment company within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an investment company subject to registration under the Investment Company Act of 1940, as amended.

(u) Registration Rights. Except as set forth on Schedule 3.1(u), no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(v) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which, to the Knowledge of the Company, is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as set forth in Schedule 3.1(v), the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. Except as set forth on Schedule 3.1(v), the Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(w) Application of Takeover Protections. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, interested stockholder, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company's issuance of the Securities and the Purchasers' ownership of the Securities.

(x) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information which is not otherwise disclosed in the SEC Reports. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the

Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(y) No Integrated Offering. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, neither the Company, nor any of its 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 circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of any applicable stockholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(z) Solvency. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities but excluding non-cash liabilities related to outstanding warrants) as they mature, (ii) except as set forth in Schedule 3.1(z)(ii), the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. Schedule 3.1(z) sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, Indebtedness means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others in excess of \$50,000, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$50,000

due under leases required to be capitalized in accordance with GAAP. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness, including, without limitation, any indebtedness owed to Hercules Technology II, L.P. or any Affiliates thereof.

(aa) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.

(bb) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the Knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of FCPA.

(cc) Accountants. To the Knowledge of the Company, Meaden & Moore, Ltd., the Company's independent registered public accounting firm, (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014.

(dd) 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 the Transaction Documents and the transactions contemplated thereby. 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 Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(ee) Acknowledgement Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(g) and 4.14 hereof), it is understood and acknowledged by the Company that: (i) none of the Purchasers have been asked by the Company to agree, nor has any Purchaser agreed, to desist from effecting any transactions (including, without limitation, purchasing or selling, long and/or short) in any securities of the Company, or derivative securities based on securities issued by the Company or to hold the Securities for any specified term; (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or derivative transactions, before or after the closing of this or future transactions, may negatively impact the market price of the Company's publicly-traded securities; (iii) any Purchaser, and counter-parties in derivative transactions to which any such Purchaser is a party, directly or indirectly, presently may have a short position in the Common Stock, and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any derivative transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Warrant Shares deliverable with respect to Securities are being determined, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that, subject to Sections 3.2(g) and 4.14, such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(ff) Regulation M Compliance. The Company has not, and to its knowledge, no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Company's placement agent in connection with the placement of the Securities.

(gg) FDA. As to each product subject to the jurisdiction of the U.S. Food and Drug Administration (FDA) under the Federal Food, Drug and Cosmetic Act, as amended, and the regulations thereunder (FDCA) that is manufactured, packaged, labeled, tested, distributed, sold, and/or marketed by the Company or any of its Subsidiaries (each such product, a Pharmaceutical Product), such Pharmaceutical Product is being manufactured, packaged, labeled, tested, distributed, sold and/or marketed by the Company in compliance with all applicable requirements under FDCA and similar laws, rules and regulations relating to registration, investigational use, premarket clearance, licensure, or application approval, good manufacturing practices, good laboratory practices, good clinical practices, product listing, quotas, labeling,

advertising, record keeping and filing of reports, except where the failure to be in compliance would not reasonably be expected to have a Material Adverse Effect. There is no pending, completed or, to the Knowledge of the Company, threatened, action (including any lawsuit, arbitration, or legal or administrative or regulatory proceeding, charge, complaint, or investigation) against the Company or any of its Subsidiaries, and none of the Company or any of its Subsidiaries has received any notice, warning letter or other communication from the FDA or any other governmental entity, which (i) contests the premarket clearance, licensure, registration, or approval of, the uses of, the distribution of, the manufacturing or packaging of, the testing of, the sale of, or the labeling and promotion of any Pharmaceutical Product, (ii) withdraws its approval of, requests the recall, suspension, or seizure of, or withdraws or orders the withdrawal of advertising or sales promotional materials relating to, any Pharmaceutical Product, (iii) imposes a clinical hold on any clinical investigation by the Company or any of its Subsidiaries, (iv) enjoins production at any facility of the Company or any of its Subsidiaries, (v) enters or proposes to enter into a consent decree of permanent injunction with the Company or any of its Subsidiaries, or (vi) otherwise alleges any violation of any laws, rules or regulations by the Company or any of its Subsidiaries, and which, either individually or in the aggregate, would have a Material Adverse Effect. The properties, business and operations of the Company have been and are being conducted in all material respects in accordance with all applicable laws, rules and regulations of the FDA. The Company has not been informed by the FDA that the FDA will prohibit the marketing, sale, license or use in the United States of any product proposed to be developed, produced or marketed by the Company nor has the FDA expressed any concern as to approving or clearing for marketing any product being developed or proposed to be developed by the Company.

(hh) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (OFAC).

(ii) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended.

(jj) Bank Holding Company Act. To the Knowledge of the Company, neither the Company nor any of its Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the BHCA) and to regulation by the Board of Governors of the Federal Reserve System (the Federal Reserve). Neither the Company nor any of its Subsidiaries or Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(kk) Money Laundering. To the Knowledge of the Company, the operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (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 involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the Knowledge of the Company, threatened.

(ll) Private Placement. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, no registration under the Securities Act is required for the offer and sale of the Series A Warrants, the Preferred Stock, the Series A Warrant Shares and the Conversion Shares issuable upon exercise thereof by the Company to the Purchasers as contemplated hereby.

(mm) Form S-3 Eligibility. The Company is eligible to register the resale of the Series A Warrant Shares and the Conversion Shares for resale by the Purchaser on Form S-3 promulgated under the Securities Act.

(nn) No General Solicitation. Neither the Company nor any person acting on behalf of the Company has offered or sold any of the Securities by any form of general solicitation or general advertising. The Company has offered the Securities for sale only to the Purchasers and certain other accredited investors within the meaning of Rule 501 under the Securities Act.

(oo) No Disqualification Events. With respect to the Securities to be offered and sold hereunder in reliance on Rule 506 under the Securities Act, none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the time of sale (each, an Issuer Covered Person and, together, Issuer Covered Persons) is subject to any of the Bad Actor disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a Disqualification Event), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Purchasers a copy of any disclosures provided thereunder.

(pp) Other Covered Persons. Other than the Placement Agent, the Company is not aware of any person (other than any Issuer Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of any Securities.

(qq) Notice of Disqualification Events. The Company will notify the Purchasers and the Placement Agent in writing, prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, reasonably be expected to become a Disqualification Event relating to any Issuer Covered Person, in each case of which it is aware.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the execution of this Agreement on the date hereof to the Company as follows (unless as of a specific date therein):

(a) Organization; Authority. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and performance by such Purchaser of the transactions contemplated by this Agreement have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) No Conflicts. The execution, delivery and performance of the Transaction Documents to which it is a party by such Purchaser and the consummation by such Purchaser of the transactions contemplated thereby do not and will not: (i) conflict with or violate, if such Purchaser is an entity, any provision of the Purchaser's certificate or articles of incorporation, bylaws or other organizational or charter documents, (ii) violate, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse or time or both) of, any agreement, credit facility, debt or other instrument to which such Purchaser is a party or (iii) result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which such Purchaser is subject (including federal and state securities laws and regulations) or by which any property or asset of such Purchaser is bound or affected; except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which would not individually or in the aggregate, reasonably be expected to have a material adverse effect on the transactions contemplated hereby or in the other Transaction Documents or the authority or ability of such Purchaser to perform its obligations under the Transaction Documents.

(c) Understandings or Arrangements. Such Purchaser is acquiring the Securities as principal for its own account and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities (this representation and warranty not limiting such Purchaser's right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business. Such Purchaser understands that the Series A Warrants, the Preferred Stock, the Series A Warrant Shares and the Conversion Shares are restricted securities and have not been registered under the Securities Act or any applicable state securities law and is acquiring such Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser's right to sell such Securities pursuant to a registration statement or otherwise in compliance with applicable federal and state securities laws).

(d) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and as of the date hereof it is, and on each date on which it exercises any Series A Warrants or converts any Preferred Stock, it will be either: (i) an accredited investor as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act or (ii) a qualified institutional buyer as defined in Rule 144A(a) under the Securities Act.

(e) Experience of Such Purchaser. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(f) Access to Information. Such Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment. Such Purchaser acknowledges and agrees that neither the Placement Agent nor any Affiliate of the Placement Agent has provided such Purchaser with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agent nor any Affiliate has made or makes any representation as to the Company or the quality of the Securities and the Placement Agent

and any Affiliate may have acquired non-public information with respect to the Company which such Purchaser agrees need not be provided to it. In connection with the issuance of the Securities to such Purchaser, neither the Placement Agent nor any of its Affiliates has acted as a financial advisor or fiduciary to such Purchaser.

(g) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that such Purchaser first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the representation set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement, such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Each Purchaser acknowledges that they have had the opportunity to read the Prospectus, the Prospectus Supplement, the Registration Statement and the SEC Reports. Notwithstanding the foregoing, for avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect Short Sales or similar transactions in the future.

(h) Disclosure Package. Such Purchaser represents that it has received (or otherwise had made available to it by the filing by the Company of an electronic version thereof with the Commission) the Prospectus, dated February , 2015, which is a part of the Registration Statement, the documents incorporated by reference therein and any free writing prospectus (collectively, the Disclosure Package), prior to or in connection with the receipt of this Agreement. Such Purchaser acknowledges that, prior to the delivery of this Agreement to the Company, such Purchaser will receive certain additional information regarding the offering contemplated by this Agreement, including pricing information. Such information may be provided to the Purchaser by any means permitted under the Securities Act, including the Prospectus Supplement, a free writing prospectus and oral communications.

(i) Disclosure. Such Purchaser acknowledges and agrees that the Company is not making any representation or warranty and has not made any representation or warranty other than those set forth in the Transaction Documents.

(j) No General Solicitation. Such Purchaser did not learn of the investment in the Securities as a result of any general solicitation or general advertising.

The Company acknowledges and agrees that the representations contained in Section 3.2 shall not modify, amend or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in the Transaction Documents.

ARTICLE IV.

OTHER AGREEMENTS OF THE PARTIES

4.1 Warrant Shares and Conversion Shares. The shares of Common Stock underlying the Series B Prefunded Warrants shall be issued free of legends. If (i) all or any portion of a Warrant is exercised at a time when there is an effective registration statement to cover the resale of the Warrant Shares or if the Warrant is exercised via cashless exercise, the Warrant Shares issued pursuant to any such exercise shall be issued free of all legends and (ii) all or any shares of Preferred Stock are converted at a time when there is an effective registration statement covering the issuance or resale of the Conversion Shares underlying the Preferred Stock or Rule 144 is available for resale of such Conversion Shares underlying the Preferred Stock, such Conversion Shares shall be issued free of legends. If at any time following the date hereof the Registration Statement, or if at any time following the date on which the Resale Registration Statement is declared effective, such Registration Statement or Resale Registration Statement (or any subsequent registration statement registering the sale or resale of the Warrant Shares or the Conversion Shares), as applicable, is not effective or is not otherwise available for the sale or resale of the Warrant Shares or Conversion Shares, the Company shall immediately notify the holders of the Warrants and Preferred Stock, as applicable, in writing that such registration statement is not then effective and thereafter shall promptly notify such holders when the registration statement is effective again and available for the resale of the Warrant Shares or Conversion Shares (it being understood and agreed that the foregoing shall not limit the ability of the Company to issue, or any Purchaser to sell, any of the Warrant Shares or Conversion Shares in compliance with applicable federal and state securities laws). The Company shall use best efforts to keep a registration statement (including the Registration Statement or the Resale Registration Statement, as applicable) registering the sale or resale of the Warrant Shares or the Conversion Shares effective during the term of the Warrants and while the Preferred Stock remains outstanding.

4.2 Furnishing of Information. Until the earliest of the time that (i) no Purchaser owns Securities or (ii) the Warrants have expired, the Company covenants to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

4.3 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market on which the Company's securities are listed or quoted such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction or prior to the conversion date of any securities that would not be convertible without stockholder approval of the transaction in which they were issued.

4.4 Securities Laws Disclosure; Publicity. The Company shall (a) on or before 9:30 a.m. (New York City time) on the date hereof, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act (the 8-K Filing). From and after the issuance of the press release, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, agents, employees, or Affiliates, on the one hand, and any of the Purchasers or any of their Affiliates, on the other hand, shall terminate. The Company may issue any press release or file any Current Report in accordance with the first sentence of this Section 4.4 without the prior consent of any Purchaser, so long as such disclosures are made in accordance with this Section 4.4. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. The Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b).

4.5 Stockholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an Acquiring Person under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4.6 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company covenants and agrees that neither it, nor any other Person acting on its behalf, will provide any Purchaser or its agents or counsel with any information that the Company believes constitutes material non-public information, unless prior thereto such Purchaser shall have entered into a written agreement with the Company regarding the confidentiality and use of such information. To the extent that the Company delivers any material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchase shall not

have any duty of confidentiality to the Company, any of its Subsidiaries, or any of their respective officers, directors, agents, employees or Affiliates, or a duty to the Company, and of its Subsidiaries or any of their respective officers, directors, agents, employees or Affiliates not to trade on the basis of, such material, non-public information. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.7 Use of Proceeds. Except as set forth on Schedule 4.7 attached hereto, the Company shall use the net proceeds from the sale of the Securities hereunder as described in the Prospectus Supplement and shall not use such proceeds: (a) for the satisfaction of any portion of the Company's debt (other than payment of trade payables in the ordinary course of the Company's business and prior practices), (b) for the redemption of any Common Stock or Common Stock Equivalents, (c) for the settlement of any outstanding litigation or (d) in violation of FCPA or OFAC regulations.

4.8 Indemnification of Purchasers. Subject to the provisions of this Section 4.8, the Company will indemnify and hold each Purchaser and its directors, officers, stockholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, stockholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a Purchaser Party) harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any material breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be

responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.8 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.9 Reservation of Common Stock. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue all of the Shares pursuant to this Agreement, all of the Warrant Shares pursuant to any exercise of the Warrants and all of the Conversion Shares pursuant to any conversion of the Preferred Stock.

4.10 Listing of Common Stock. Until the Purchasers no longer hold any Warrants, the Company hereby agrees to use best efforts to maintain the listing or quotation of the Common Stock on the Trading Market on which it is currently listed, and concurrently with the Closing, the Company shall apply to list or quote all of the Shares, Warrant Shares and Conversion Shares on such Trading Market and promptly secure the listing of all of the Shares, Warrant Shares and Conversion Shares on such Trading Market. The Company further agrees, if the Company applies to have the Common Stock traded on any other Trading Market, it will then include in such application all of the Shares, Warrant Shares and Conversion Shares, and will take such other action as is necessary to cause all of the Shares, Warrant Shares and Conversion Shares to be listed or quoted on such other Trading Market as promptly as possible. The Company will then take all action reasonably necessary to continue the listing and trading of its Common Stock on a Trading Market and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer. In addition, the Company shall hold a special meeting of shareholders (which may also be at the annual meeting of shareholders) at the earliest practical date following the date hereof, but in no event later than April 1, 2015,¹ for the purpose of obtaining Shareholder Approval, with the recommendation of the Company's Board of Directors that such proposal be approved, and the Company shall solicit proxies from its shareholders in connection therewith in the same manner as all other management proposals in such proxy statement and all management-appointed proxyholders shall vote their proxies in favor of such proposal. The Company shall retain and use the services of a proxy solicitation firm to solicit proxies for the special meeting of shareholders (or annual meeting of shareholders) in connection with Shareholder Approval. If the Company does not obtain Shareholder

¹ 75 days following date of Purchase Agreement

Approval at the first meeting, the Company shall call a meeting every 65 days thereafter to seek Shareholder Approval until the earlier of the date Shareholder Approval is obtained or the Warrants are no longer outstanding.

4.11 Participation in Future Financing.

(a) From the date hereof until the date that is the 12 month anniversary of the Shareholder Approval Date, upon any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents for cash consideration (other than in an underwritten public offering) (a Subsequent Financing), each Purchaser shall have the right to participate in up to an amount of the Subsequent Financing equal to 50% of the Subsequent Financing (the Participation Maximum) on the same terms, conditions and price provided for in the Subsequent Financing.

(b) At least one (1) Trading Day prior to the closing of the Subsequent Financing, the Company shall deliver to each Purchaser a written notice of its intention to effect a Subsequent Financing (Pre-Notice), which Pre-Notice shall ask such Purchaser if it wants to review the details of such financing (such additional notice, a Subsequent Financing Notice), provided that such Pre-Notice shall be only delivered between the hours of 9:00 a.m. and 4:00 p.m. (New York City Time) during a Trading Day. Upon the request of a Purchaser, and only upon a request by such Purchaser, for a Subsequent Financing Notice, the Company shall promptly, but no later than one (1) hour after such request, deliver a Subsequent Financing Notice to such Purchaser. The Subsequent Financing Notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet or similar document relating thereto as an attachment.

(c) Any Purchaser desiring to participate in such Subsequent Financing must provide written notice to the Company by not later than 5:30 p.m. (New York City time) on the first (1st) Trading Day after all of the Purchasers have received the Pre-Notice that such Purchaser is willing to participate in the Subsequent Financing, the amount of such Purchaser's participation, and representing and warranting that such Purchaser has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice. If the Company receives no such notice from a Purchaser as of such first (1st) Trading Day, such Purchaser shall be deemed to have notified the Company that it does not elect to participate.

(d) If by 5:30 p.m. (New York City time) on the first (1st) Trading Day after all of the Purchasers have received the Pre-Notice, notifications by the Purchasers of their willingness to participate in the Subsequent Financing (or to cause their designees to participate) is, in the aggregate, less than the total amount of the Participation Maximum, then the Company may effect the remaining portion of such Subsequent Financing on the terms and with the Persons set forth in the Subsequent Financing Notice.

(e) If by 5:30 p.m. (New York City time) on the first (1st) Trading Day after all of the Purchasers have received the Pre-Notice, the Company receives responses to a Subsequent Financing Notice from Purchasers seeking to purchase more than the aggregate amount of the Participation Maximum, each such Purchaser shall have the right to purchase its Pro Rata Portion (as defined below) of the Participation Maximum. Pro Rata Portion means the ratio of (x) the Subscription Amount of Securities purchased on the Closing Date by a Purchaser participating under this Section 4.11 and (y) the sum of the aggregate Subscription Amounts of Securities purchased on the Closing Date by all Purchasers participating under this Section 4.11.

(f) The Company must provide the Purchasers with a second Subsequent Financing Notice, and the Purchasers will again have the right of participation set forth above in this Section 4.11, if the Subsequent Financing subject to the initial Subsequent Financing Notice is not consummated for any reason on the terms set forth in such Subsequent Financing Notice within 30 Trading Days after the date of the initial Subsequent Financing Notice.

(g) The Company and each Purchaser agree that if any Purchaser elects to participate in the Subsequent Financing, the transaction documents related to the Subsequent Financing shall not include any term or provision whereby such Purchaser shall be required to agree to any restrictions on trading as to any of the Securities purchased hereunder or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, this Agreement, without the prior written consent of such Purchaser.

(h) Notwithstanding anything to the contrary in this Section 4.11 and unless otherwise agreed to by such Purchaser, the Company shall either confirm in writing to such Purchaser that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that such Purchaser will not be in possession of any material, non-public information, by the fifth (5th) Business Day following delivery of the Subsequent Financing Notice. If by such fifth (5th) Business Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by such Purchaser, such transaction shall be deemed to have been abandoned and such Purchaser shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

(i) Notwithstanding the foregoing, this Section 4.11 shall not apply in respect of an Exempt Issuance.

4.12 Subsequent Equity Sales.

(a) From the date hereof until the later of (i) the Shareholder Approval Date and (ii) 75th day following the Closing Date, neither the Company nor any of its Subsidiaries shall, directly or indirectly, issue, offer, sell, grant any option or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any

option or right to purchase or other disposition of) any equity security or any equity-linked or related security (including, without limitation, any equity security (as that term is defined under Rule 405 promulgated under the Securities Act), any Common Stock Equivalents, any debt, any preferred stock or any purchase rights); provided, however, that the 75 day period set forth in this Section 4.12 shall be extended for the number of Trading Days during such period in which trading in the Common Stock is suspended by any Trading Market, provided, further, that the filing of a registration statement for primary offerings by the Company shall be deemed to not be an announcement of an issuance or proposed issuance of Common Stock or Common Stock Equivalents hereunder.

(b) From the date hereof until the twelve (12) month anniversary of the Shareholder Approval Date, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents for cash consideration (or a combination of units thereof) involving a Variable Rate Transaction. Variable Rate Transaction means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into any agreement, including, but not limited to, an equity line of credit, whereby the Company may sell securities at a future determined price. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(c) Until the Shareholder Approval Date, neither the Company nor any Subsidiary shall make any issuance whatsoever of Common Stock or Common Stock Equivalents. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(d) Notwithstanding the foregoing, this Section 4.12 shall not apply in respect of an Exempt Issuance, except that no Variable Rate Transaction shall be an Exempt Issuance.

4.13 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration is also offered to all of the parties to this Agreement. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

4.14 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it nor any Affiliate acting on its behalf or pursuant to any understanding with it will execute any purchases or sales, including Short Sales of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4. Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.4, such Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Disclosure Schedules. Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4, (ii) no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4. Except as otherwise agreed under this Section 4.14, no Purchaser shall have any duty of confidentiality to the Company or its Subsidiaries after the issuance of the initial press release as described in Section 4.4. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

4.15 Capital Changes. Until the one year anniversary of the Closing Date, the Company shall not undertake a reverse or forward stock split or reclassification of the Common Stock without the prior written consent of the Purchasers holding a majority in interest of the Shares; provided, however, that this Section 4.15 shall not apply solely in connection with any reverse stock split conducted to maintain compliance with the listing standards of the Trading Market.

4.16 Exercise Procedures. The form of Notice of Exercise included in the Warrants and the form of Notice of Conversion included in the Certificate of Designation set forth the totality of the procedures required of the Purchasers in order to exercise the Warrants or convert the Preferred Stock. No additional legal opinion, other information or instructions shall be required of the Purchasers to exercise their Warrants or convert their Preferred Stock. Without limiting the preceding sentences, no ink-original Notice of Exercise or Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form or any Notice of Conversion form be required in order to exercise

the Warrants. The Company shall honor exercises of the Warrants and conversions of the Preferred Stock and shall deliver Warrant Shares and Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

4.17 Transfer Restrictions.

(a) The Securities may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of any Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares, or other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of a Purchaser or in connection with a pledge as contemplated in Section 4.17(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and the Registration Rights Agreement and shall have the rights and obligations of a Purchaser under this Agreement and the Registration Rights Agreement.

(b) The Purchasers agree to the imprinting, so long as is required by this Section 4.17, of a legend on the Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares issuable upon exercise thereof in the following form:

[NEITHER] THIS SECURITY [NOR THE SECURITIES INTO WHICH THIS SECURITY IS [EXERCISABLE] [CONVERTIBLE]] HAS [NOT] BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE SECURITIES ACT), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS SECURITY [AND THE SECURITIES ISSUABLE UPON [EXERCISE] [CONVERSION] OF THIS SECURITY] MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN ACCREDITED INVESTOR AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

(c) Certificates evidencing the Series A Warrant Shares issuable upon exercise of the Series A Warrants and the Conversion Shares issuable upon conversion of the Preferred Stock shall not contain any legend (including the legend set forth above): (i) while a registration statement covering the resale of such security is effective under the Securities Act, (ii) following any sale of such Series A Warrant Shares or Conversion Shares

pursuant to Rule 144, (iii) if such Series A Warrant Shares or Conversion Shares are eligible for sale under Rule 144 or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission). The Company shall cause its counsel to issue a legal opinion to the Transfer Agent promptly after the effective date of the Resale Registration Statement if required by the Transfer Agent to effect the removal of the legend hereunder. If a Series A Warrant is exercised at a time when there is an effective registration statement to cover the resale of the Series A Warrant Shares issuable in respect thereof, the Preferred Stock is converted at a time when there is an effective registration statement to cover the resale of the Conversion Shares, if such Series A Warrant Shares may be sold under Rule 144 or the Conversion Shares may be sold under Rule 144 or if such legend is not otherwise required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission) then such Series A Warrant Shares and Conversion Shares, as applicable, shall be issued free of all legends. The Company agrees that following such time as such legend is no longer required under this Section 4.17(c), it will, no later than three Trading Days following the delivery by a Purchaser to the Company or the Transfer Agent of a certificate representing Series A Warrant Shares or Conversion Shares issued with a restrictive legend (such third Trading Day, the Legend Removal Date), deliver or cause to be delivered to such Purchaser a certificate representing such shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in this Section 4.17. Certificates for such Series A Warrant Shares or Conversion Shares subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Purchaser by crediting the account of the Purchaser's prime broker with the Depository Trust Company System as directed by such Purchaser.

(d) In addition to such Purchaser's other available remedies, the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, for each \$1,000 of Series A Warrant Shares or Conversion Shares (based on the VWAP of the Common Stock on the date such Series A Warrant Shares or Conversion Shares, as applicable, are submitted to the Transfer Agent) delivered for removal of the restrictive legend and subject to Section 4.17(c), \$10 per Trading Day (increasing to \$20 per Trading Day three (3) Trading Days after such damages have begun to accrue) for each Trading Day after the Legend Removal Date until such certificate is delivered without a legend. Nothing herein shall limit such Purchaser's right to pursue actual damages for the Company's failure to deliver certificates representing any Securities as required by the Transaction Documents, and such Purchaser shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief.

(e) Each Purchaser, severally and not jointly with the other Purchasers, agrees with the Company that such Purchaser will sell any restricted Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares pursuant to either the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if any Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares are sold pursuant to a registration statement, they will be sold in compliance with the plan of distribution set forth therein,

and acknowledges that the removal of the restrictive legend from certificates representing Series A Warrants, Preferred Stock, Series A Warrant Shares or Conversion Shares as set forth in this Section 4.17 is predicated upon the Company's reliance upon this understanding.

ARTICLE V.

MISCELLANEOUS

5.1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the Closing has not been consummated on or before February 1, 2015; provided, however, that no such termination will affect the right of any party to sue for any breach by any other party (or parties).

5.2 Fees and Expenses. At the Closing, the Company has agreed to reimburse Alpha Capital (Alpha) the non-accountable sum of \$20,000 for its legal fees and expenses. Accordingly, in lieu of the foregoing reimbursement, the aggregate amount that Alpha shall pay for the Securities at the Closing shall be reduced by \$20,000 in lieu thereof. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any exercise notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, the Prospectus and the Prospectus Supplement, contain the entire understanding of the parties solely with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, solely with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules; provided, however, nothing contained in this Agreement or any other Transaction Document shall (or shall be deemed to) (i) have any effect on any agreements any Purchaser has entered into with the Company or any of its Subsidiaries prior to the date hereof with respect to any prior investment made by such Purchaser in the Company or (ii) waive, alter, modify or amend in any respect any obligations of the Company or any of its Subsidiaries, or any rights of or benefits to any Purchaser or any other Person, in any agreement entered into prior to the date hereof between or among the Company and/or any of its Subsidiaries and any Purchaser and all such agreements shall continue in full force and effect.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile or e-mail at the facsimile number or e-mail address set forth on the signature pages attached hereto prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or

e-mail at the facsimile number or e-mail address set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Purchasers having original Subscription Amounts totaling at least a majority of the aggregate original Subscription Amounts at the Closing, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

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

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Prior to the Closing Date, no Purchaser may assign any or all of its rights under this Agreement to any Person without the prior written consent of the Company. After the Closing Date, any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the Purchasers.

5.8 Third-Party Beneficiaries. The Placement Agent shall be a third party beneficiary with respect to the representations and warranties of the Company in Section 3.1 herein and the representations and warranties of the Purchasers in Section 3.2 herein. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.8 and this Section 5.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute

hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of the Transaction Documents (a Legal Proceeding), then, in addition to the obligations of the Company under Section 4.8, the prevailing party in such Legal Proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding. A party that successfully moves to dismiss a Legal Proceeding is, without limitation, a prevailing party. This Section 5.9 shall survive the expiration or earlier termination of this Agreement.

5.10 Survival. The representations and warranties contained herein shall survive the Closing and the delivery of the Securities for a period of three (3) years from the Closing Date.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a .pdf format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or .pdf signature page were an original thereof.

5.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in

whole or in part without prejudice to its future actions and rights; provided, however, that in the case of a rescission of an exercise of a Warrant or a conversion of the Preferred Stock, the applicable Purchaser shall be required to return any shares of Common Stock subject to any such rescinded exercise or conversion notice concurrently with the return to such Purchaser of the aggregate exercise price paid to the Company for such Warrant Shares and the restoration of such Purchaser's right to acquire such Warrant Shares pursuant to such Purchaser's Warrant (including, issuance of a replacement warrant certificate evidencing such restored right).

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also execute a customary affidavit and pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for

any other Purchaser to be joined as an additional party in any proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through EGS. EGS does not represent any of the Purchasers and only represents the Placement Agent. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

5.18 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.19 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.20 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

5.21 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

CLEVELAND BIOLABS, INC.

Address for Notice:

By:
Name: Yakov Kogan, Ph.D., MBA
Title: Chief Executive Officer

73 High Street
Buffalo, NY 14203
Fax: 716-849-6820

With a copy to (which shall not constitute notice):

Email: Notices@cbiolabs.com

Cooley, LLC
Attn: Marc Recht

500 Boylston Street, 14th Floor

Boston, MA 02116

Fax: 617-937-2400

Email: mrecht@cooley.com

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SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGES TO CBLI SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser:

Signature of Authorized Signatory of Purchaser:

Name of Authorized Signatory:

Title of Authorized Signatory:

Email Address of Authorized Signatory:

Facsimile Number of Authorized Signatory:

Address for Notice to Purchaser:

Address for Delivery of Warrants and Preferred Stock to Purchaser (if not same as address for notice):

Subscription Amount: \$

Shares: (DWAC Information Below)

Name and Contact for Broker:

Broker No.:

Account No.:

Account Holder:

Shares of Preferred Stock:

Series A Warrant Shares:

Series B Prefunded Warrant Shares, if applicable:

EIN Number:

“ Notwithstanding anything contained in this Agreement to the contrary, by checking this box (i) the obligations of the above-signed to purchase the securities set forth in this Agreement to be purchased from the Company by the above-signed, and the obligations of the Company to sell such securities to the above-signed, shall be unconditional and all conditions to Closing shall be disregarded, (ii) the Closing shall occur on the third (3rd) Trading Day following the date of this Agreement and (iii) any condition to Closing contemplated by this Agreement (but prior to being disregarded by clause (i) above) that required delivery by the Company or the above-signed of any agreement, instrument, certificate or the like or purchase price (as applicable) shall no longer be a condition and shall instead be an unconditional obligation of the Company or the above-signed (as applicable) to deliver such agreement, instrument, certificate or the like or purchase price (as applicable) to such other party on the Closing Date.

[SIGNATURE PAGES CONTINUE]

SUMMARY

This summary highlights selected information about our company, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus, in the documents we incorporate by reference and in any free writing prospectus that we have authorized for use in connection with this offering. This summary is not complete and does not contain all the information that you should consider before investing in our common stock and the accompanying warrants. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the Risk Factors contained in this prospectus supplement, the accompanying prospectus and the financial documents and notes incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

The Company

We are an innovative biopharmaceutical company seeking to develop first-in-class pharmaceuticals designed to address diseases with significant unmet medical need. We combine our proven scientific expertise and our depth of knowledge about our products' mechanisms of action into a passion for developing drugs to save lives. Our programs are focused on the implementation of novel pharmacological approaches to control cell death. Our proprietary drug candidates act via unique mechanisms that are designed to kill cancer and protect healthy cells. We conduct business in the United States and the Russian Federation and have worldwide development and commercialization rights to all of our product candidates, subject to certain financial obligations to our current licensors. Our lead product candidates are entolimod, which we are developing as a radiation countermeasure and an oncology drug, and CBL0137, our lead oncology product candidate. We also have an additional clinical stage program and multiple innovative projects in different stages of preclinical drug development. Our primary product development programs and their respective development stages are illustrated below:

* *Lead product development program*

** *HSC means hematopoietic stem cell*

Entolimod, our most advanced product candidate, is a Toll-like receptor 5, or TLR5, agonist, which we are developing as a radiation countermeasure for prevention of death from Acute Radiation Syndrome, or ARS, and as an oncology drug. We believe that entolimod is the most efficacious radiation countermeasure currently in development. Following is a summary of the clinical development of entolimod to date and regulatory status:

Entolimod is being developed under the U.S. Food & Drug Administration's, or FDA's, Animal Efficacy Rule, or the Animal Rule, for the indication of reducing the risk of death following exposure to potentially lethal irradiation occurring as a result of a radiation disaster. We anticipated that entolimod will be administered within 25 hours following radiation exposure. We have completed two dose escalation clinical studies designed to evaluate the safety, pharmacokinetics and pharmacodynamics in a total of 150 healthy volunteers. Administration of entolimod was not associated with irreversible harm at any of the doses evaluated in these two studies. We have completed a Good Laboratory Practices, or GLP, randomized, blinded, placebo-controlled, pivotal study designed to evaluate the dose-dependent effect of entolimod on survival and biomarker induction in 179 non-human primates exposed to 7.2 Gy total body irradiation when entolimod or placebo were administered at 25 hours after radiation exposure. We have completed a GLP, randomized, open-label, placebo-controlled, pivotal study designed to evaluate the dose-dependent effect of Entolimod on biomarker induction in 160 non-irradiated non-human primates. We met with the FDA in July 2014 to present our human dose-conversion and to discuss our intent to submit a pre-Emergency Use Application, or pre-EUA. The FDA confirmed that our existing efficacy and safety data and animal-to-human dose conversion are sufficient to proceed with a pre-EUA submission and agreed to accept a pre-EUA application for review. We are currently preparing the pre-EUA submission, which we anticipate filing in the first half of 2015. If the FDA authorizes the application, then Federal agencies will be free to procure entolimod to stockpile and distribute in the event of an emergency, i.e. prior to the drug being formally approved by FDA under a Biologic License Application, or BLA.

We received contracts and grants with the U.S. government totaling \$44.6 million for the development of our lead compound, entolimod, for biodefense application as a radiation countermeasure through December 31, 2014. In January 2015, we announced that we received notice that the proposal application to support further development of entolimod as a medical radiation countermeasure was recommended for funding subject to negotiations by the Department of Defense, or DoD, office of Congressionally Directed Medical Research Programs, or CDMRP. The subject proposal includes aims to conduct several pivotal animal studies required by the FDA for submission of a BLA. There is no guarantee that DoD will award us a contract based on this proposal, or if an award is made, that it will support the studies originally proposed. The award of a contract by DoD based on the referenced proposal is subject to completion of successful negotiations and availability of funds.

Additionally, we have completed enrollment in a Phase 1 open-label, dose-escalation trial of entolimod in patients with advanced cancer in the United States and have begun dosing in a small expansion study in the Russian Federation enrolling additional patients at the highest doses achieved in the U.S. study. Both studies include evaluation of immune cell response to administrations of entolimod.

CBL0137, our lead oncology product candidate, acts through a novel mechanism enabling this compound to simultaneously target several molecular pathways within cancer cells. We believe that CBL0137 has the potential to be a broadly-marketed cancer treatment that will address the unmet needs of treating multiple types of cancer that are resistant to current treatments. CBL0137 inhibits Nuclear Factor kappa-B, or NF-kB, Heat Shock Factor Protein-1, or HSF-1, and Hypoxia-inducible factor 1-alpha, or HIF1 alpha, transcription factors that are essential for viability of many types of tumors and activates tumor suppressor protein p53 by modulating intracellular localization and activity of chromatin remodeling complex Facilitates Chromatin Transcription, or FACT. CBL0137 has demonstrated reproducible anti-tumor effects in animal models of colon, breast, renal, pancreatic, head and neck and prostate cancers, melanoma, non-small cell lung cancer, glioblastoma, lymphoma, leukemia and neuroblastoma. We are currently enrolling two Phase 1 trials of CBL0137: (i) a multi-center, single agent, dose-escalation study in the Russian Federation evaluating oral administration of CBL0137 in subjects with advanced solid tumors that are resistant or refractory to standard of care treatment; and (ii) a multi-center, single agent dose-escalation study in the United States, evaluating intravenous administration of CBL0137 in patients with metastatic or unresectable advanced solid cancers and lymphomas. We are conducting parallel evaluation of oral and intravenous routes of administration and continuous low-dose versus interrupted high-dose schedules to reduce our developmental risk by fully characterizing the clinical pharmacology of CBL0137.

In January 2015, we announced clinical progress with CBL0137. A formal interim analysis of the 19 patients enrolled in the first six cohorts of the ongoing oral administration study indicated that the study medication was well tolerated at all investigated dose levels. The observation of drug exposure in plasma documented high oral bioavailability (typically estimated to be $\geq 50\%$). To date, no dose-limiting toxicities have been observed with either oral or intravenous administration through the highest CBL0137 dose levels tested. Heavily pretreated patients with advanced cancers of the esophagus, colon, breast, cervix, and prostate have had stable disease for periods ranging from 4 to 6 months. Peripheral blood mononuclear cells (PBMC) from evaluable blood samples have shown pharmacodynamic effects consistent with the expected mechanism of action of CBL0137.

Our Partners

In December 2009, we entered into a Participation Agreement with BioProcess Capital Partners, LLC, a Russian Federation venture capital fund, to create a joint venture, Incuron, LLC (Incuron), to develop our Curaxin line of anti-cancer product candidates including CBL0137, a new, proprietary molecule optimized to better target similar mechanisms of action in combating cancer. Incuron is our partially-owned subsidiary, with approximately 46.97% of its equity interests held by us as at December 31, 2015.

In September 2011, we entered into an Investment Agreement with Open Joint Stock Company Rusnano , or Rusnano, a multi-billion Russian Federation venture fund, governing the creation of Panacela, a joint venture company formed to develop five separate product candidates. Panacela is a partially-owned subsidiary, with 54.6% of its shares held by us as at September 30, 2014. Panacela is currently performing under a three-year contract, received in October 2013, valued at approximately 149 million rubles with the Ministry of Industry and Trade of the Russian Federation to support pre-clinical and clinical studies of its product candidate, Mobilan, a cancer vaccine that is expected to enter the clinic in the first half of 2015.

Additionally, we leverage close development relationships with Roswell Park Cancer Institute, Cleveland Clinic Foundation and Children s Cancer Institute Australia. Together, our team of legal entities, financial partners and other collaborators engage in the collective development efforts necessary to advance all of our product candidates towards marketing approval and commercialization.

RISK FACTORS

Before purchasing our common stock and the accompanying warrants, you should carefully consider the risk factors set forth below and under the heading Risk Factors included in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, as well as all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering. The risks and uncertainties described below and in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the risks described below or in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, actually occur, our business, financial condition and results of operations could suffer. As a result, the trading price of our stock could decline, perhaps significantly, and you could lose all or part of your investment. The risks discussed below and in most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See the section entitled Forward-Looking Information.

Risks Related To Our Financial Condition And Need For Additional Capital

We will require substantial additional financing in order to meet our business objectives.

Since our inception, most of our resources have been dedicated to the pre-clinical and clinical development of our product candidates. In particular, we are currently conducting multiple clinical trials of our product candidates, each of which will require substantial funds to complete. We believe that we will continue to expend substantial resources for the foreseeable future developing our pre-clinical and clinical product candidates. These expenditures will include costs associated with research and development, conducting pre-clinical and clinical studies, obtaining regulatory approvals and products from third-party manufacturers, as well as marketing and selling any products approved for sale. In addition, other unanticipated costs may arise. For example, if one of our subsidiaries faces insolvency, we may elect to make additional capital contributions to fund its operations and any such cash contributions will reduce cash available for our business. Because the outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts of capital necessary to successfully complete the development and commercialization of our product candidates.

As of September 30, 2014, our cash, cash equivalents and short-term investments available to CBLI amounted to \$9.2 million. We believe that our existing cash, cash equivalents and marketable securities will allow us to fund our operating plan into the first quarter of 2015.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amounts of our total capital requirements. Our future capital requirements depend on many factors, including:

the number and characteristics of the product candidates we pursue;

the scope, progress, results and costs of researching and developing our product candidates, and conducting pre-clinical and clinical studies;

the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;

the cost of commercialization activities for any of our product candidates that are approved for sale, including marketing, sales and distribution costs;

the cost of manufacturing our product candidates and any products we successfully commercialize;

our ability to establish and maintain strategic partnerships, licensing or other arrangements and the financial terms of such agreements;

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;

whether we realize the full amount of any projected cost savings associated with our strategic restructuring;

the occurrence of a breach or event of default under our loan agreement with Hercules Technology II, L.P., or Hercules, or under any other agreements with third parties;

the success of any pre-EUA submission we make with the FDA; and

the timing, receipt and amount of sales of, or royalties on, our future products, if any.

If our available cash and cash equivalents are insufficient to satisfy our liquidity requirements, or if we identify additional opportunities to do so, we may seek to sell additional equity or debt securities or obtain additional credit facilities. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock or through additional credit facilities, these securities and/or the loans under credit facilities could provide for rights senior to those of our common stock and could contain covenants that would restrict our operations. Furthermore, any funds raised through collaboration and licensing arrangements with third parties may require us to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us. In any such event, our business prospects, financial condition and results of operations could be materially adversely affected.

Even after taking into account the proceeds expected to be received from the sale of shares of our common stock offered pursuant to this prospectus supplement and the concurrent private placement of warrants, we may require additional capital beyond our currently forecasted amounts and additional funds may not be available when we need them, on terms that are acceptable to us, or at all. In particular, the decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. In addition, the variable rate clauses in the stock purchase agreement for the purchase of the common stock offered hereunder and the warrants to be offered in a concurrent private placement prohibit certain types of capital raising activities for certain periods of time and the pledge of assets in our loan and security agreement with Hercules, which may inhibit our ability to attract future investors and/or lenders. Additionally, our corporate structure, including the ownership of several of our product candidates in our non-wholly owned subsidiaries, may deter third parties from entering into collaboration and licensing arrangements with us. If we fail to raise sufficient additional financing, on terms and dates acceptable to us, we may not be able to continue our operations and the development of our product candidates, and may be required to reduce staff, reduce or eliminate research and development, slow the development of our product candidates, outsource or eliminate several business functions or shut down operations.

We have a history of operating losses. We expect to continue to incur losses and may not continue as a going concern.

We have incurred net losses of \$9.6 million and \$145.2 million for the nine months ended September 30, 2014 and since inception, respectively. We expect significant losses to continue for the next few years as we spend substantial sums on the continued research and development of our proprietary product candidates. There is no certainty that we will ever become profitable as a result of these expenditures. As a result of losses that will continue throughout our development stage, we may exhaust our financial resources and be unable to complete the development of our product candidates.

Our ability to become profitable depends primarily on the following factors:

our ability to obtain adequate sources of continued financing;

our ability to obtain approval for, and if approved, to successfully commercialize our product candidates;

our ability to successfully enter into license, development or other partnership agreements with third-parties for the development and/or commercialization of one or more of our product candidates;

our R&D efforts, including the timing and cost of clinical trials; and

our ability to enter into favorable alliances with third-parties who can provide substantial capabilities in clinical development, manufacturing, regulatory affairs, sales, marketing and distribution.

Even if we successfully develop and market our product candidates, we may not generate sufficient or sustainable revenue to achieve or sustain profitability.

We may be unable to service our existing debt due to lack of cash flow, which could lead to default.

In September 2013, we entered into a loan and security agreement with Hercules under which we borrowed \$6.0 million. The current interest rate is 10.45%, with the initial 12 months of the facility requiring interest only payments and the following 30 months requiring interest and principal payments. The loan matures on January 1, 2017. Since entering into the agreement with Hercules and prior to a \$4.0 million principal payment in June 2014, we had been making monthly interest-only payments to Hercules of approximately \$54,000 per month. Commencing in November 2014, our payments increased to approximately \$76,000 per month to include amortization of principal, with a principal and interest payment of approximately \$205,000 due in January 2017. Additionally, upon termination of the loan, we will also owe Hercules an end-of-term fee of \$550,000. As of December 31, 2014, the remaining principal and end-of-term fee owed to Hercules amounted to \$2.4 million. We granted Hercules a first priority security interest in substantially all of our assets, with the exception of (i) our intellectual property, where the security interest is limited to proceeds of intellectual property, and (ii) following the June 2014 loan paydown of \$4.0 million, our equity interest in Incuron.

If we do not make the required payments when due, either at maturity, or at applicable installment payment dates, or if we breach the agreement, default under the agreement as a result of an occurrence of a material adverse event, as defined in the loan agreement, or become insolvent, Hercules could elect to declare all amounts outstanding together with all accrued and unpaid interest and penalties, to be immediately due and payable. In order to continue our planned operations and satisfy our debt obligations with Hercules, we will need to raise additional capital in the future. Additional capital may not be available on terms acceptable to us, or at all. Even if we were able to repay the full amount in cash, any such repayment could leave us with little or no working capital for our business. If we are unable to repay these amounts, Hercules will have a first claim on our assets pledged under the loan agreement. If Hercules should attempt to foreclose on the collateral, there may not be any assets remaining for distribution to shareholders after repayment in full of such secured indebtedness. Any default under the loan agreement and resulting foreclosure would have a material adverse effect on our financial condition and our ability to continue our operations.

Additionally, in September 2013, our partially owned subsidiary Panacela entered into a \$1.5 million Convertible Loan Agreement with Rusnano, or the Rusnano Loan, and is required to pay all unpaid principal and interest under the loan in September 2015. The loan may be converted into shares of Panacela stock at any time at Rusnano's option or will automatically convert upon certain financing events. In the event Panacela defaults on the loan and such default is not cured, Rusnano shall have the right to exercise a warrant to purchase shares of Cleveland BioLabs common stock equal to 69.2% of the outstanding amount remaining unpaid under the Rusnano Loan at the time of exercise, divided by the exercise price of \$33.88 per share.

Our ability to use our net operating loss carryforwards may be limited.

As of December 31, 2013, we had federal net operating loss carryforwards, or NOLs, of \$109.9 million to offset future taxable income, which begin to expire if not utilized by 2023. Under the provisions of the Internal Revenue Code, substantial changes in our ownership, in certain circumstances, will limit the amount of NOLs that can be utilized annually in the future to offset taxable income. In particular, section 382 of the Internal Revenue Code imposed limitations on a company's ability to use NOLs if a company experiences a more than 50% ownership change over a three-year period. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we will pay more taxes than if we were able to utilize our NOLs fully. A full valuation allowance has been recorded against our deferred tax assets, including the net operating loss carryforwards, as we believe it is more likely than not we will be unable to realize the benefit of these assets.

Risks Relating to our Securities and this Offering

There is uncertainty regarding the application of the federal and state securities laws to our offering of common stock and warrants, and there is a corresponding risk that we could be required to refund the purchase price of securities offered to purchasers who so elect.

We are conducting an offering under a registration statement filed with the Securities and Exchange Commission and a concurrent private placement intended to comply with the requirements of Section 4(a)(2) under the Securities Act of 1933, as amended, and Rule 506(b) promulgated thereunder. See Private Placement Transaction and Warrants. Shares of common stock and warrants are being offering and sold in combination. The shares of common stock and pre-funded warrants are intended to be offered and sold in a transaction registered under the Securities Act, while the other warrants and shares of common stock issuable thereunder are intended to be offered and sold in a private placement exempt from the registration requirements of the Securities Act.

While we are aware of other transactions using a concurrent public/private offering approach, the Commission has not addressed whether concurrent public and private offerings and sales to the same prospective investors would adversely impact the public offering or preclude the private offering from satisfying the requirements of Rule 506(b). If the securities offered in our concurrent private placement do not satisfy the conditions of Rule 506(b), the offering would be a violation of Section 5 of the Securities Act and each purchaser would have the right to rescind its purchase of the securities, meaning that we would be required to refund the purchase price of the securities to each purchaser electing rescission. If that were to occur, we would face severe financial demands and reputational harm that could adversely affect our business and operations. Additionally, if we did not in fact qualify for the exemptions upon which it has relied, we may become subject to significant fines and penalties imposed by the Commission. It is also possible that additional remedies may be available to purchasers under applicable state law.

If we are unable to obtain shareholder approval for the issuance of the all of the shares of common stock upon conversion of the Preferred Stock, exercise of the Series B Pre-funded Warrants or exercise of the Series A Warrants, we will owe dividend, redemption and other obligations on the Preferred Stock.

We agreed to seek approval from our stockholders as may be required by the applicable rules and regulations of the Nasdaq Stock Market, including the issuance of all of the shares of common stock upon conversion of the Preferred Stock and exercise of the Series B Pre-funded Warrants in excess of 19.99% of our issued and outstanding common stock on the closing date of the agreement, including certain adjustments to the conversion price of the Preferred Stock and exercise of the Series B Pre-funded Warrants. We refer to this approval as the Shareholder Approval. Each share of Preferred Stock will be convertible into Common Stock at any time at the election of the investor, subject to obtaining the Shareholder Approval for any amounts exceeding these thresholds. If we are unable to obtain the Shareholder Approval, we will be required to call a meeting every 65 days to continue seeking the Shareholder Approval until obtained or the Preferred Stock is no longer outstanding.

In addition, among other conditions, until we obtain Stockholder Approval, we will be required to continue complying with negative covenants that limit our ability to incur debt, incur liens, amend our charter documents, repurchase securities, pay dividends or enter into related party transactions, which could adversely impact our operations.

The price of our common stock has been and could remain volatile, which may in turn expose us to securities litigation.

The market price of our common stock has historically experienced and may continue to experience significant volatility. In 2014, the market price of our common stock, which is listed on the NASDAQ Capital Market, fluctuated from a high of \$24.80 per share in the first quarter of 2014 to a low of \$5.40 in the fourth quarter of 2014. As of January 30, 2015 the closing price of our common stock was \$3.93. The listing of our common stock on the NASDAQ Capital Market does not assure that a meaningful, consistent and liquid trading market will exist, and in recent years, the market has experienced extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like us. Our common stock is thus subject to this volatility in addition to volatility caused by the occurrence of industry and company specific events. Factors that could cause fluctuations include, but are not limited to, the following:

Our progress in developing and commercializing our products;

Price and volume fluctuations in the overall stock market from time to time;

Fluctuations in stock market prices and trading volumes of similar companies;

Actual or anticipated changes in our earnings or fluctuations in our operating results or in the expectations of securities analysts;

General economic conditions and trends;

Major catastrophic events;

Sales of large blocks of our stock;

Departures of key personnel;

Changes in the regulatory status of our product candidates, including results of our pre-clinical studies and clinical trials;

Status of contract and funding negotiations relating to our product candidates;

Events affecting our collaborators;

Announcements of new products or technologies, commercial relationships or other events by us or our competitors;

Regulatory developments in the U.S. and other countries;

Failure of our common stock to be listed or quoted on the NASDAQ Capital Market, other national market system or any national stock exchange;

Changes in accounting principles; and

Discussion of us or our stock price by the financial and scientific press and in online investor communities.

As a result of the volatility of our stock price, we could be subject to securities litigation, which could result in substantial costs and divert management's attention and company resources from our business.

We have received a delisting notice from The NASDAQ Stock Market. Our common stock may be involuntarily delisted from trading on The NASDAQ Capital Market if we fail to regain compliance with the minimum closing bid price requirement of \$1.00 per share. A delisting of our common stock is likely to reduce the liquidity of our common stock and may inhibit or preclude our ability to raise additional financing.

The quantitative listing standards of the NASDAQ Stock Market, or NASDAQ, require, among other things, that listed companies maintain a minimum closing bid price of \$1.00 per share. We failed to satisfy this threshold for 30 consecutive trading days and on March 10, 2014, we received a letter from NASDAQ indicating that we have been provided an initial period of 180 calendar days, or until September 8, 2014, in which to regain compliance. On September 9, 2014 we received an additional 180-day compliance period that will end on March 9, 2015. If we do not regain compliance by March 9, 2015, the NASDAQ staff will provide written notice that our common stock is subject to delisting. To regain compliance with this listing requirement, we conducted a reverse split of our common stock. We received approval from our shareholders on January 27, 2015 to conduct a reverse stock split and we effected such split on January 28, 2015.

In addition to the minimum closing bid price requirement, we are required to comply with certain NASDAQ continued listing requirements, including a series of financial tests relating to shareholder equity, public float, and number of market makers and shareholders. If we fail to maintain compliance with any of those requirements, our common stock could be delisted from NASDAQ's Capital Market. If, for any reason, NASDAQ should delist our common stock from trading on its exchange and we are unable to obtain listing on another national securities exchange or take action to restore our compliance with the NASDAQ continued listing requirements, a reduction in some or all of the following may occur, each of which could have a material adverse effect on our shareholders:

the liquidity of our common stock;

the market price of our common stock;

our ability to obtain financing for the continuation of our operations;

the number of institutional and general investors that will consider investing in our common stock;

the number of investors in general that will consider investing in our common stock;

the number of market makers in our common stock;

the availability of information concerning the trading prices and volume of our common stock; and

the number of broker-dealers willing to execute trades in shares of our common stock.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these reports and we currently do not have any industry analysts covering us. In the event we do regain analyst coverage, there can be no assurance that analysts will provide favorable coverage. Our stock price may be adversely impacted by our current lack of analyst coverage as we may have less visibility in the financial markets than other companies in our industry, which may cause declined trading volume and stock price.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The public offering price of the shares offered by this prospectus will be substantially higher than the as adjusted net tangible book value per share of our common stock based on the total value of our tangible assets less our total liabilities immediately following this offering. Therefore, if you purchase shares of our common stock in this offering, you will experience immediate and substantial dilution of approximately \$0.347 per share in the price you pay for shares of our common stock as compared to the as adjusted net tangible book value per share, based on the assumed public offering price of \$3.00 per share. In addition, we have a significant number of options and warrants outstanding. To the extent outstanding options or warrants to purchase shares of common stock are exercised, there will be further dilution. For further information on this calculation, see [Dilution](#) elsewhere in this prospectus.

We have broad discretion in the use of net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section entitled [Use of Proceeds](#), and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their intended use. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

We have filed a registration statement with the SEC for the offering to which this communication relates. Before you invest, you should read the registration statement and other documents we have filed with the SEC for more complete information about us and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov.