
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (date of earliest event reported): **February 4, 2015**

BioTime, Inc.

(Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation)

1-12830

(Commission File Number)

94-3127919

(IRS Employer Identification No.)

1301 Harbor Bay Parkway

Alameda, California 94502

(Address of principal executive offices)

(510) 521-3390

(Registrant's telephone number, including area code)

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

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

Any statements that are not historical fact (including, but not limited to statements that contain words such as “may,” “will,” “believes,” “plans,” “intends,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Additional factors that could cause actual results to differ materially from the results anticipated in these forward-looking statements are contained in BioTime’s periodic reports filed with the Securities and Exchange Commission (“SEC”) under the heading “Risk Factors” and other filings that BioTime may make with the SEC. Undue reliance should not be placed on these forward-looking statements which speak only as of the date they are made, and the facts and assumptions underlying these statements may change. Except as required by law, BioTime disclaims any intent or obligation to update these forward-looking statements.

Section 1 - Registrant’s Business and Operations

Item 1.01 - Entry into a Material Definitive Agreement.

On February 5, 2015, our majority-owned subsidiary Asterias Biotherapeutics, Inc. (“Asterias”) conducted a public offering of 384,615 shares (the “Public Offering Shares”) of Asterias Series A Common Stock, par value \$0.0001 per share (“Common Stock”), at a public offering price of \$3.90 per share, for an aggregate gross purchase price of \$1,499,998.50. MLV & Co. LLC (“MLV”) acted as the Sole Book-Running Manager for the offer and sale of the Public Offering Shares pursuant to an Underwriting Agreement (the “Underwriting Agreement”), dated February 5, 2015.

The Public Offering Shares were offered and sold pursuant to a prospectus supplement filed with the Securities and Exchange Commission (the “Commission”) pursuant to Rule 424(b) of the Securities Act of 1933, as amended (the “Securities Act”), in connection with a takedown from Asterias’ shelf registration statement on Form S-3 (File No. 333-200745), which became effective on January 22, 2015. Asterias expects to close the offering on February 10, 2015, subject to the satisfaction of customary closing conditions as set forth in the Underwriting Agreement.

The Underwriting Agreement contains customary representations and warranties of the parties and indemnification and contribution provisions under which Asterias, on the one hand, and MLV, on the other hand, have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act. The foregoing description of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Underwriting Agreement, a copy of which is filed as Exhibit 1.1 hereto and is incorporated herein by reference.

The information provided in response to Item 3.02 is incorporated by reference.

Section 3 - Securities and Trading Markets

Item 3.02 - Unregistered Sales of Equity Securities.

On February 4, 2015, Asterias entered into subscription agreements (the “Subscription Agreements”) with Broadwood Partners, L.P., British & American Investment Trust PLC, and Pedro Lichtinger (or an entity controlled by Mr. Lichtinger) for the sale of an aggregate of 1,025,640 shares (the “Private Placement Shares”) of Common Stock at a price of \$3.90 per share, for an aggregate purchase price of \$3,999,996, in a private placement. No commissions or broker fees were paid in connection with the sale of the Private Placement Shares. The form of Subscription Agreement is filed as Exhibit 99.1 hereto. Asterias expects to close the sale of the Private Placement Shares on February 9, 2015.

Broadwood Partners, L.P. is our largest shareholder and one of our directors, Neal C. Bradsher, is President, and one of Asterias' directors, Richard T. LeBuhn, is Senior Vice President, of Broadwood Capital, Inc., the investment manager of Broadwood Partners, L.P. Pedro Lichtinger is Asterias' Chief Executive Officer and a member of its Board of Directors. British & American Investment Trust PLC is an affiliate of a shareholder of Asterias.

The offer and sale of the Private Placement Shares is made in reliance upon the exemption from registration under Section 4(a)(2) of the Securities Act and Rule 506 thereunder.

Section 9-Financial Statements and Exhibits

Item 9.01 Financial Statements and Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
1.1	Underwriting Agreement, dated February 5, 2015, by and between Asterias Biotherapeutics, Inc. and MLV & Co. LLC
99.1	Form of Subscription Agreement, dated February 4, 2015, by and among Asterias Biotherapeutics, Inc. and the investors named therein

SIGNATURES

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

BIOTIME, INC.

Date: February 5, 2015

By: s/Robert W. Peabody
Senior Vice President and
Chief Financial Officer

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ASTERIAS BIOTHERAPEUTICS, INC.

384,615 Shares of Common Stock

UNDERWRITING AGREEMENT

February 5, 2015

MLV & Co. LLC
1251 Avenue of the Americas, 41st Floor
New York, NY 10020

Ladies and Gentlemen:

Asterias Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), proposes, subject to the terms and conditions of this Underwriting Agreement (this “**Agreement**”), to issue and sell to MLV & Co. LLC (the “**Underwriter**”), an aggregate of 384,615 shares (the “**Shares**”) of the Company’s Series A common stock, par value \$0.0001 per share (the “**Common Stock**”).

1. *Representations and Warranties of the Company.* The Company represents and warrants to the Underwriter, as of the date hereof and as of the Closing Date (as defined below), and agrees with the Underwriter, that:

(a) *Filing of Registration Statement.* The Company has prepared and filed, in conformity with the requirements of the Securities Act of 1933, as amended (the “**Securities Act**”), and the published rules and regulations thereunder (the “**Rules and Regulations**”) adopted by the Securities and Exchange Commission (the “**Commission**”), a registration statement, including a prospectus, on Form S-3 (File No. 333-200745), relating to the Shares and the offering thereof (the “**Offering**”) from time to time in accordance with Rule 415(a)(1)(x) of the Rules and Regulations, and such amendments thereof as may have been required to the date of this Agreement. The term “**Registration Statement**” as used in this Agreement means the aforementioned registration statement, at the time of effectiveness of such registration statement or any part thereof for purposes of Section 11 of the Securities Act (the “**Effective Time**”), including (i) all documents filed as a part thereof or incorporated or deemed to be incorporated by reference therein and (ii) any information in the corresponding Base Prospectus (as defined below) or a prospectus supplement relating to the Shares filed with the Commission pursuant to Rule 424(b) under the Securities Act, to the extent such information is deemed pursuant to Rule 430A (“**Rule 430A**”), 430B (“**Rule 430B**”) or 430C (“**Rule 430C**”) under the Securities Act to be a part thereof at the Effective Time. For purposes of this Agreement, all references to the Registration Statement, the Base Prospectus, any Preliminary Prospectus (as defined below), the Prospectus (as defined below) or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“**EDGAR**”). All references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to mean and include the subsequent filing of any document under the Securities Exchange Act of 1934, as amended and the rules and regulations thereunder (the “**Exchange Act**”), that is deemed to be incorporated therein by reference therein.

(b) *Effectiveness of Registration Statement; Certain Defined Terms.* The Company and the transactions contemplated by this Agreement meet the requirements and comply with the conditions for the use of Form S-3 under the Securities Act. The Registration Statement meets, and the offering and sale of the Shares by the Company as contemplated hereby complies with, the requirements of Rule 415 under the Securities Act (including, without limitation, Rule 415(a)(4) and (a)(5) of the Rules and Regulations). The aggregate market value of the Company's voting and non-voting common equity held by non-affiliates of the Company was \$33,847,366 based on the last reported sale price of the Common Stock of \$3.90 on the NYSE MKT on February 4, 2015. The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information. No stop order preventing or suspending use of the Registration Statement, any Preliminary Prospectus or the Prospectus or the effectiveness of the Registration Statement has been issued by the Commission, and no proceedings for such purpose pursuant to Section 8A of the Securities Act against the Company or related to the Offering have been instituted or are pending or, to the Company's knowledge, are contemplated or threatened by the Commission, and any request received by the Company on the part of the Commission for additional information has been complied with. As used in this Agreement:

(i) "**Base Prospectus**" means the prospectus included in the Registration Statement at the Effective Time.

(ii) "**Disclosure Package**" means (i) the Statutory Prospectus, (ii) each Issuer Free Writing Prospectus, if any, filed or used by the Company on or before the Effective Time and listed on Schedule II hereto (other than a roadshow that is an Issuer Free Writing Prospectus but is not required to be filed under Rule 433 of the Rules and Regulations), all considered together, and (iii) the information included on Schedule III hereto all considered together.

(iii) "**Issuer Free Writing Prospectus**" means any "**issuer free writing prospectus**," as defined in Rule 433 of the Rules and Regulations relating to the Shares in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) of the Rules and Regulations.

(iv) "**Preliminary Prospectus**" means any preliminary prospectus supplement, subject to completion, relating to the Shares, filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act for use in connection with the offering and sale of the Shares, together with the Base Prospectus attached to or used with such preliminary prospectus supplement.

(v)“**Prospectus**” means the final prospectus supplement, relating to the Shares, filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act on or before the second business day after the date hereof (or such earlier time as may be required under the Securities Act), in the form furnished by the Company to the Underwriter, for use in connection with the Offering that discloses the public offering price and other final terms of the Shares, together with the Base Prospectus attached to or used with such final prospectus supplement.

(vi)“**Statutory Prospectus**” means the Preliminary Prospectus, if any, and the Base Prospectus, each as amended and supplemented immediately prior to the Time of Sale, and any prospectus supplement.

(vii)“**Time of Sale**” means 10 a.m., New York City time, on the date of this Agreement.

(c) *Conformity with the EDGAR filing.* The Prospectus delivered by the Company to the Underwriter for use in connection with the sale of the Shares pursuant to this Agreement will be identical to the versions of the Prospectus transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(d) *Contents of Registration Statement.* As of each Effective Time, the Registration Statement complied in all material respects with the requirements of the Securities Act and the Rules and Regulations and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, provided that the Company makes no representation or warranty in this subsection (d) with respect to statements in or omissions from the Registration Statement in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of the Underwriter or its representatives specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter’s Information (as defined in Section 6(b) hereof).

(e) *Contents of Prospectus.* The Prospectus, as of its date and as of the Closing Date will comply in all material respects with the Rules and Regulations of the Securities Act and will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, provided that the Company makes no representation or warranty with respect to statements in or omissions from the Prospectus in reliance upon, and in conformity with, written information furnished to the Company to the Underwriter or its representatives specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter’s Information.

(f) *Incorporated Documents.* Each of the documents incorporated or deemed to be incorporated by reference in the Registration Statement, at the time such document was filed with the Commission or at the time such document became effective, as applicable, complied, in all material respects, with the requirements of the Exchange Act, was filed on a timely basis with the Commission and did not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(g) *Disclosure Package.* The Disclosure Package, as of the Time of Sale, did not, and at the Closing Date will not, contain any untrue statement of a material fact or omit to state any 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; provided that the Company makes no representations or warranties in this subsection (g) with respect to statements in or omissions from the Disclosure Package in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of the Underwriter specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter's Information.

(h) *Distributed Materials; Conflict with Registration Statement.* Other than the Base Prospectus, any Preliminary Prospectus and the Prospectus, the Company has not made, used, authorized, approved or referred to and will not make, use, authorize, approve or refer to any "written communication" (as defined in Rule 405 under the Securities Act, ("**Rule 405**")) that constitutes an offer to sell or a solicitation of an offer to buy the Shares other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rules 134 and 135 under the Securities Act or (ii) the documents listed on Schedule II hereto and other written communications approved in advance by the Underwriter.

(i) *Issuer Free Writing Prospectuses.* Each Issuer Free Writing Prospectus, if any, conformed or will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations on the date of first use, and the Company has complied or will comply with any filing requirements applicable to such Issuer Free Writing Prospectus pursuant to the Rules and Regulations. Each Issuer Free Writing Prospectus, if any, when considered together with the Disclosure Package, as of its issue date and at all subsequent times through the completion of the Prospectus Delivery Period did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, the Statutory Prospectus or the Prospectus, including any document incorporated by reference therein and any prospectus supplement deemed to be a part thereof that has not been superseded or modified, or include an untrue statement of a material fact or omitted or would omit 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 prevailing at the subsequent time, not misleading; provided that the Company makes no representation or warranty with respect to statements in or omissions from any Issuer Free Writing Prospectus in reliance upon, and in conformity with, written information furnished to the Company to the Underwriter or its representatives specifically for inclusion therein, which information the parties hereto agree is limited to the Underwriter's Information. As used herein, the term "**Prospectus Delivery Period**" means such period of time after the first date of the Offering of the Shares as in the reasonable opinion of counsel for the Underwriter a prospectus relating to the Shares is required by law to be delivered (or required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Shares by the Underwriter or any Selected Dealers (as defined below).

(j) *Not an Ineligible Issuer.* (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Shares and (ii) at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 under the Securities Act.

(k) *Emerging Growth Company.* From the time of the initial filing of the Registration Statement and through the date hereof, the Company has been and is an “emerging growth company,” as defined in Section 2(a) of the Securities Act (an “**Emerging Growth Company**”). “Testing-the-Waters Communication” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(l) *Testing-the-Waters Communications.* The Company (a) has not alone engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Underwriter (including but not limited to communications previously disclosed by the Company to the Underwriter with respect to an offering of securities to parties identified by the Company) with entities that are qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are accredited investors within the meaning of Rule 501 under the Securities Act and (b) has not authorized anyone other than the Underwriter to engage in Testing-the-Waters Communications. The Company reconfirms that the Underwriter has been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications (as defined herein). “Written Testing-the-Waters Communication” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

(m) *Financial Information.* The consolidated financial statements and the related notes thereto included or incorporated by reference in the Registration Statement, Disclosure Package and the Prospectus comply with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly, the financial position of the Company as of the dates indicated and the results of its operations and the changes in its consolidated cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis throughout the periods covered thereby (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim financial statements, to the extent that they may not include footnotes or may be condensed or summary statements as noted therein), and the other financial information included or incorporated by reference in the Registration Statement, Disclosure Package and the Prospectus has been derived from the accounting records of the Company and presents fairly the information shown thereby. Any pro forma financial statements or data included or incorporated by reference in the Registration Statement, Disclosure Package and the Prospectus comply with the requirements of Regulation S-X of the Securities Act, including, without limitation, Article 11 thereof, and the assumptions used in the preparation of such pro forma financial statements and data are reasonable, the pro forma adjustments used therein are appropriate to give effect to the circumstances referred to therein and the pro forma adjustments have been properly applied to the historical amounts in the compilation of those statements and data. No other financial statements or schedules of the Company or any other entity are required by the Securities Act to be included in the Registration Statement or the Prospectus. All disclosures contained in the Registration Statement, Disclosure Package and the Prospectus regarding “non-GAAP financial measures” (as such term is defined by Item 10 of Regulation S-K under the Securities Act) comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K under the Securities Act, to the extent applicable. The Company does not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations and any “variable interest entities” within the meaning of Financial Accounting Standards Board Interpretation No. 46), not disclosed in the Registration Statement and the Prospectus.

(n) *Conformity with EDGAR Filing.* The Prospectus delivered to the Underwriter for use in connection with the sale of the Shares pursuant to this Agreement will be identical to the versions of the Prospectus created to be transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(o) *Organization.* The Company and any subsidiary that is a significant subsidiary (as such term is defined in Rule 1-02 of Regulation S-X promulgated by the Commission) (each, a “**Subsidiary**”, collectively, the “**Subsidiaries**”), are duly organized, validly existing and in good standing under the laws of their respective jurisdictions of organization. The Company and the Subsidiaries are duly licensed or qualified as a foreign corporation, limited liability company or limited partnership for transaction of business and is in good standing under the laws of each other jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such license or qualification, and have all corporate power and authority necessary to own or hold their respective properties and to conduct their respective businesses as described in the Registration Statement, the Disclosure Package and the Prospectus, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a material adverse effect or would reasonably be expected to have a material adverse effect on the assets, business, operations, earnings, properties, condition (financial or otherwise), prospects, stockholders’ equity or results of operations of the Company and the Subsidiaries taken as a whole, or prevent the consummation of the transactions contemplated hereby (a “**Material Adverse Effect**”).

(p) *Subsidiaries.* As of the date hereof, the Company’s only Subsidiaries are set forth on Schedule V and Schedule V accurately sets forth whether each such Subsidiary is a corporation or limited liability company and the jurisdiction of organization of each such subsidiary and, in the case of any subsidiary which is a limited liability company, its managing members. The Company owns directly or indirectly, all of the equity interests of the Subsidiaries free and clear of any lien, charge, security interest, encumbrance, right of first refusal or other restriction, and all the equity interests of the Subsidiaries are validly issued and are fully paid, nonassessable and free of preemptive and similar rights.

(q) *No Violation or Default.* Neither the Company nor any Subsidiary is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any Subsidiary is a party or by which the Company or any Subsidiary is bound or to which any of the property or assets of the Company or any Subsidiary is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of each of clauses (ii) and (iii) above, for any such violation or default that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. To the Company's knowledge, no other party under any material contract or other agreement to which it or any Subsidiary is a party is in default in any respect thereunder where such default would have a Material Adverse Effect.

(r) *No Material Adverse Change.* Subsequent to the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, and except as may be otherwise stated or incorporated by reference in the Registration Statement, the Disclosure Package and the Prospectus, there has not been (i) any material change in the capital stock of the Company or long-term debt of the Company or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, that has resulted in or that would reasonably be expected to result in a Material Adverse Effect to the Company taken as a whole; (ii) any transaction or agreement, not in the ordinary course of business, entered into by the Company that is material to the Company taken as a whole or incurred any liability or obligation, direct or contingent, not in the ordinary course of business, that is material to the Company taken as a whole; (iii) any material adverse change in the business, properties, management, financial position, stockholders' equity, or results of operations of the Company, taken as a whole; and (iv) any material loss or interference sustained by the Company with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority.

(s) *Capitalization.* The issued and outstanding shares of capital stock of the Company have been validly issued, are fully paid and nonassessable and, other than as disclosed in the Registration Statement, Disclosure Package or the Prospectus, are not subject to any preemptive rights, rights of first refusal or similar rights. The Company has an authorized, issued and outstanding capitalization as set forth in the Registration Statement, Disclosure Package and the Prospectus as of the dates referred to therein (other than the grant of additional options under the Company's existing stock incentive plans, or changes in the number of outstanding shares of Common Stock of the Company due to the issuance of shares upon the exercise or conversion of securities exercisable for, or convertible into, shares of Common Stock outstanding on the date hereof) and such authorized capital stock conforms to the description thereof set forth in the Registration Statement, Disclosure Package and the Prospectus. The description of the securities of the Company in the Registration Statement, Disclosure Package and the Prospectus is complete and accurate in all material respects. Except as disclosed in the Registration Statement, Disclosure Package or the Prospectus, as of the date referred to therein, the Company does not have outstanding any options to purchase, or any rights or warrants to subscribe for, or any securities or obligations convertible into, or exchangeable for, or any contracts or commitments to issue or sell, any shares of capital stock or other securities other than the concurrent private placement of Common Stock to certain accredited investors (the "**Private Placement**") on term substantially similar to the Offering.

(t) *Authorization; Enforceability.* The Company has full legal right, power and authority to enter into this Agreement and perform the transactions contemplated hereby. This Agreement has been duly authorized, executed and delivered by the Company and is a legal, valid and binding agreement of the Company enforceable in accordance with its terms, except to the extent that (i) enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general equitable principles and (ii) the indemnification and contribution provisions of Section 6 hereof may be limited by federal or state securities laws and public policy considerations in respect thereof.

(u) *The Shares.* The issuance of the Shares has been duly and validly authorized by the Company, and the Shares, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been duly and validly issued and will be fully paid and nonassessable, will not be subject to any statutory or contractual preemptive rights or other rights to subscribe for or purchase or acquire any shares of capital stock of the Company which have not been waived or complied with, and will conform in all material respects to the description thereof contained in the Registration Statement, Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same.

(v) *No Consents Required.* No consent, approval, authorization, order, registration or qualification of or with any court or arbitrator or governmental or regulatory authority is required for the execution, delivery and performance by the Company of this Agreement, the issuance and sale by the Company of the Shares, except for the registration of the Shares under the Securities Act and such consents, approvals, authorizations, orders and registrations or qualifications as may be required under applicable state securities laws or by the by-laws and rules of the Financial Industry Regulatory Authority ("**FINRA**") or the NYSE MKT LLC (the "**Exchange**") in connection with the purchase and distribution of the Shares by the Underwriter.

(w) *No Preferential Rights.* Except as set forth in the Registration Statement, Disclosure Package and the Prospectus, (i) no person, as such term is defined in Rule 1-02 of Regulation S-X promulgated under the Securities Act (each, a “**Person**”), has the right, contractual or otherwise, to cause the Company to issue or sell to such Person any shares of Common Stock, Preferred Stock or shares of any other capital stock or other securities of the Company, (ii) no Person has any preemptive rights, resale rights, rights of first refusal, or any other rights (whether pursuant to a “poison pill” provision or otherwise) to purchase any shares of Common Stock, Preferred Stock or shares of any other capital stock or other securities of the Company, (iii) other than the Underwriter, no Person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Shares, and (iv) no Person has the right, contractual or otherwise, to require the Company to register under the Securities Act any shares of Common Stock, preferred stock or shares of any other capital stock or other securities of the Company, or to include any such shares or other securities in the Registration Statement or the offering contemplated thereby, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Shares as contemplated thereby or otherwise.

(x) *Independent Public Accountants.* Rothstein, Kass & Company, PC (the “**Predecessor Accountant**”), whose report on the financial statements of the Company is filed with the Commission as part of the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013 and is incorporated into the Registration Statement, Disclosure Package, and Prospectus, was, during the periods covered by their report, an independent registered public accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board (United States). OUM & Co. LLP (together with the Predecessor Accountant the “**Accountants**”), is an independent public registered accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board (United States), and is the Company’s current auditor. To the Company’s knowledge, neither of the Accountants are in violation of the auditor independence requirements of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”) with respect to the Company.

(y) *Enforceability of Agreements.* To the knowledge of the Company, all agreements between the Company and third parties expressly referenced in the Prospectus are legal, valid and binding obligations of the Company enforceable in accordance with their respective terms, except to the extent that (i) enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors’ rights generally and by general equitable principles and (ii) the indemnification provisions of certain agreements may be limited by federal or state securities laws or public policy considerations in respect thereof and except for any unenforceability that, individually or in the aggregate, would not unreasonably be expected to have a Material Adverse Effect.

(z) *Legal Proceedings.* Except as described in the Registration Statement, the Disclosure Package and the Prospectus, there are no legal, governmental or regulatory investigations, actions, suits or proceedings pending to which the Company or any Subsidiaries is or may be a party or to which any property of the Company or any Subsidiaries is or may be the subject that, individually or in the aggregate, if determined adversely to the Company or any Subsidiaries, could reasonably be expected to have a Material Adverse Effect; no such investigations, actions, suits or proceedings are, to the knowledge of the Company, threatened or contemplated by any governmental or regulatory authority or threatened by others; and (i) there are no current or pending legal, governmental or regulatory actions, suits or proceedings that are required under the Securities Act to be described in the Registration Statement, Disclosure Package or the Prospectus that are not so described in the Registration Statement, Disclosure Package and the Prospectus and (ii) there are no statutes, regulations or contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, Disclosure Package or the Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement, Disclosure Package and the Prospectus.

(aa) *Licenses and Permits.* Each of the Company and the Subsidiaries possesses all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of its properties or the conduct of its businesses as described in the Registration Statement, Disclosure Package and the Prospectus, except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect; and except as described in the Registration Statement, Disclosure Package and the Prospectus, neither the Company nor any Subsidiary has received any notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course, except where the revocation, modification or failure to renew would not, individually or in the aggregate, have a material adverse effect on the Company. To the Company's knowledge, no party granting any such licenses, certificates, permits or authorizations has taken any action to limit, suspend or revoke the same in any material respect.

(bb) *Regulatory Compliance.* Each of the Company and the Subsidiaries: (i) is and at all times has been in material compliance with all statutes, rules or regulations of the U.S. Food and Drug Administration (“**FDA**”) and other comparable federal, state, local or foreign governmental and regulatory authorities (“**Governmental Authority**”) applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company or Subsidiaries (“**Applicable Laws**”); (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any Governmental Authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company nor any Subsidiary is in material violation of any term of any such Authorizations; (iv) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any Governmental Authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any Governmental Authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) has not received notice that the FDA or any Governmental Authority has taken, is taking or intends to take action to suspend or revoke any material Authorizations and has no knowledge that the FDA or any Governmental Authority is considering such action; and (vi) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations.

(cc) *Clinical Studies.* The studies, tests and preclinical and clinical trials conducted by or, to the Company's knowledge, on behalf of the Company or Subsidiaries were and, if still ongoing, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Authorizations and Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder (collectively, "FFDCA"); the descriptions of the results of such studies, tests and trials contained in the Registration Statement, Disclosure Package and the Prospectus are, to the Company's knowledge, accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement, Disclosure Package and the Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, Disclosure Package and the Prospectus when viewed in the context in which such results are described and the clinical state of development; and, except to the extent disclosed in the Registration Statement, Disclosure Package or the Prospectus, neither the Company nor any Subsidiary has received any notices or correspondence from the FDA or any Governmental Authority requiring the termination or suspension of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company or any Subsidiary.

(dd) *No Material Defaults.* The Company has not defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect. The Company has not filed a report pursuant to Section 13(a) or 15(d) of the Exchange Act since the filing of its last Annual Report on Form 10-K, indicating that it (i) has failed to pay any dividend or sinking fund installment on preferred stock or (ii) has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(ee) *Certain Market Activities.* Neither the Company, nor any Subsidiary, nor any of their respective directors, officers or controlling persons has taken, directly or indirectly, any action designed, or that has constituted or might reasonably be expected to cause or result in, under the Exchange Act or otherwise, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares.

(ff) *OFAC.* Neither the Company, the Subsidiaries, nor, to the knowledge of the Company, 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**”); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any affiliate, joint venture partner or other person or entity, which, to the Company’s knowledge, will use such proceeds for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC

(gg) *Broker/Dealer Relationships.* Neither the Company nor any Subsidiary (i) is required to register as a “broker” or “dealer” in accordance with the provisions of the Exchange Act or (ii) directly or indirectly through one or more intermediaries, controls or is a “person associated with a member” or “associated person of a member” (within the meaning of Article I of the NASD Manual administered by FINRA).

(hh) *No Reliance.* The Company has not relied upon the Underwriter or legal counsel for the Underwriter for any legal, tax or accounting advice in connection with the offering and sale of the Shares.

(ii) *Taxes.* The Company and the Subsidiaries have filed all federal, state, local and foreign tax returns which have been required to be filed and paid all material taxes shown thereon through the date hereof. Except as otherwise disclosed in the Registration Statement, Disclosure Package or the Prospectus, no tax deficiency has been determined adversely to the Company or any Subsidiary which has had, or would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. The Company has no knowledge of any federal, state or other governmental tax deficiency, penalty or assessment which has been or might be asserted or threatened against it which could have a Material Adverse Effect.

(jj) *Title to Real and Personal Property.* The Company and the Subsidiaries have good and valid title in fee simple to all items of real property and good and valid title to all personal property described in the Registration Statement, Disclosure Package or Prospectus as being owned by them that are material to the business of the Company or such Subsidiary, in each case free and clear of all liens, encumbrances and claims, except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries or (ii) would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. Any real property described in the Registration Statement, Disclosure Package or Prospectus as being leased by the Company and the Subsidiaries is held by them under valid, existing and enforceable leases, except those that (A) do not materially interfere with the use made or proposed to be made of such property by the Company or the Subsidiaries or (B) would not be reasonably expected, individually or in the aggregate, to have a Material Adverse Effect.

(kk) *Intellectual Property.* The Company and its Subsidiaries own, possess, have valid and enforceable licenses to use, or otherwise have the rights to use on reasonable terms all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, domain names, software, copyrights, licenses, inventions, and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) and other intellectual property, including registrations and applications for registration thereof (collectively “**Intellectual Property**”) that is described in the Registration Statement, Disclosure Package or the Prospectus, or that is necessary for the conduct of their respective businesses as currently conducted and as proposed to be conducted, and neither the Company or any of its Subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with the rights of others with respect to any Intellectual Property or the conduct of their respective businesses, or of any facts or circumstances that would render any Intellectual Property invalid or inadequate to protect the interests of the Company or any of its subsidiaries therein which might reasonably be expected to have a Material Adverse Effect. Without limitation to the foregoing, and except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus (i) to the Company’s knowledge, there are no third parties who have or will be able to establish rights to any Intellectual Property of the Company or any of its Subsidiaries; (ii) none of the Intellectual Property owned by the Company and licensed to the Company, has been adjudged invalid or unenforceable in whole or in part, and there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the Company’s or any Subsidiary’s rights in or to any such Intellectual Property, or challenging the validity, enforceability or scope of any such Intellectual Property, or asserting that the Company or any Subsidiary infringes or otherwise misappropriates or violates, or would, upon the commercialization of any product or service described in the Registration Statement, Disclosure Package or the Prospectus, infringe or otherwise misappropriate or violate, any Intellectual Property of others, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim; (iii) the Company and its Subsidiaries have complied with the material terms of each agreement pursuant to which any Intellectual Property has been licensed to the Company or any Subsidiary, and all such agreements are in full force and effect; (iv) there is no prior art of which the Company is aware that may render any U.S. patent held by the Company invalid or any U.S. patent application held by the Company unpatentable which has not been disclosed to the U.S. Patent and Trademark Office; (v) none of the Intellectual Property used by the Company in its business has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or in violation of the rights of any third parties; (vi) the Company is not aware of any facts that it believes would form a reasonable basis for a successful challenge that any of its employees are in or have ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where such violation relates to such employee’s breach of a confidentiality obligation, obligation to assign to the company Intellectual Property, or obligation not to use third party Intellectual Property or other proprietary rights on behalf of the Company; and (vii) the Company is not a party to or bound by any options, licenses or other agreements with respect to the Company’s or any third party’s Intellectual Property that are required to be set forth in the Registration Statement, Disclosure Package or the Prospectus, but are not described in all material respects in the Registration Statement, Disclosure Package and the Prospectus, as applicable.

(ll) *Environmental Laws.* Each of the Company and Subsidiaries (i) is in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, “**Environmental Laws**”); (ii) has received and are in compliance with all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its businesses as described in the Registration Statement and the Prospectus; and (iii) has not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except, in the case of any of clauses (i), (ii) or (iii) above, for any such failure to comply or failure to receive required permits, licenses, other approvals or liability as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(mm) *Disclosure Controls.* The Company maintains systems 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 generally accepted accounting principles 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 is not aware of any material weaknesses in its internal controls over financial reporting, and to the Company’s knowledge such internal controls are effective. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 and 15d-15) for the Company and designed such disclosure controls and procedures to ensure that material information relating to the Company is made known to the certifying officers by others within the Company, particularly during the period in which the Company’s Annual Report on Form 10-K or Quarterly Report on Form 10-Q, as the case may be, is being prepared. The Company’s certifying officers have evaluated the effectiveness of the Company’s controls and procedures as of a date within 90 days prior to the filing date of the most recently filed Form 10-K (such date, the “**Evaluation Date**”). The Company presented in its most recently filed Form 10-K the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no significant changes in the Company’s internal controls (as such term is defined in Item 307(b) of Regulation S-K under the Securities Act) or, to the Company’s knowledge, in other factors that could significantly affect the Company’s internal controls.

(nn) *Sarbanes-Oxley.* To the knowledge of the Company, there is and has been no failure on the part of the Company and any of the Company’s directors or officers, in their capacities as such, to comply with any applicable provisions of the Sarbanes-Oxley Act and the rules and regulations promulgated thereunder. Each of the principal executive officer and the principal financial officer of the Company (or each former principal executive officer of the Company and each former principal financial officer of the Company as applicable) has made all certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act with respect to all reports, schedules, forms, statements and other documents required to be filed by it or furnished by it to the Commission. For purposes of the preceding sentence, “principal executive officer” and “principal financial officer” shall have the meanings given to such terms in the Sarbanes-Oxley Act.

(oo) *Finder's Fees.* Other than as contemplated in this Agreement, the Company has not incurred any liability for any finder's fees, brokerage commissions or similar payments in connection with the Offering.

(pp) *Labor Disputes.* No labor disturbance by or dispute with employees of the Company or any Subsidiary exists or, to the knowledge of the Company, is threatened which would reasonably be expected to result in a Material Adverse Effect.

(qq) *Investment Company Act.* Neither the Company nor any Subsidiary is, or, after giving effect to the offering and sale of the Shares, will be an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended (the "**Investment Company Act**").

(rr) *Operations.* The operations of the Company and the 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, the money laundering statutes of all jurisdictions to which the Company or the Subsidiaries are subject, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**"), except as would not reasonably be expected to result in a Material Adverse Effect; 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.

(ss) *Lock-Up.* During the period commencing on and including the date hereof and ending on and including the 60th day following the date of this Agreement (as the same may be extended as described below, the "**Lock-Up Period**") the Company will not, without the prior written consent of the Underwriter (which consent may be withheld at the sole discretion of the Underwriter), directly or indirectly (i) other than the Private Placement, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company other than the Company's sale of the Shares hereunder; provided however, the Company may issue equity awards to the Company's employees and directors pursuant to the Company's equity incentive plans, provided that such equity awards may not vest during the Lock-Up Period (or in the case of stock options, such stock options may not be exercisable during the Lock-Up Period); (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company, other than a registration statement on Form S-8; or (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii) or (iii) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise.

Notwithstanding the foregoing, but only to the extent that the rules of FINRA relating to the following extensions (or any successor rules) are applicable to the Company and in effect, and only if the Company loses its status as an Emerging Growth Company, if (i) during the last 17 days of the Lock-Up Period, the Company issues an earnings release or material news or a material event relating to the Company occurs, or (ii) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results or becomes aware that material news or a material event will occur during the 16-day period beginning on the last day of the Lock-Up Period, the restrictions imposed by this subsection (ss) shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of such material news or material event, as applicable, unless the Underwriter waives, in writing, such extension; provided, however, that this extension of the Lock-Up Period shall not apply to the extent that the Company meets the applicable requirements under Rule 139 of the Securities Act and the Company's Common Stock is actively traded as defined in Regulation M of the Exchange Act. The Company will provide the Underwriter with prior notice of any such announcement that gives rise to an extension of the Lock-up Period, subject to the Underwriter's agreement to hold such information in confidence prior to public disclosure of the same. In addition, the Company will cause each person and entity listed in Schedule IV to furnish to the Underwriter, prior to the first Closing Date, a letter, substantially in the form of Exhibit A hereto (the "**Lock-Up Agreement**").

(tt) *Off-Balance Sheet Arrangements.* There are no transactions, arrangements and other relationships between and/or among the Company, and/or, to the knowledge of the Company, any of its affiliates and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity (each, an "**Off Balance Sheet Transaction**") that would reasonably be expected to affect materially the Company's liquidity or the availability of or requirements for its capital resources, including those Off Balance Sheet Transactions described in the Commission's Statement about Management's Discussion and Analysis of Financial Conditions and Results of Operations (Release Nos. 33-8056; 34-45321; FR-61), required to be described in the Prospectus which have not been described as required.

(uu) *FINRA.* There are no affiliations or associations between any member of FINRA and any of the Company's officers, directors or 5% or greater securityholders, except as set forth in the Registration Statement, the Disclosure Package and the Prospectus.

(vv) *ERISA.* To the knowledge of the Company, each material employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“**ERISA**”), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company and the Subsidiaries has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Internal Revenue Code of 1986, as amended (the “Code”); no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred which would result in a material liability to the Company with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption; and for each such plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no “accumulated funding deficiency” as defined in Section 412 of the Code has been incurred, whether or not waived, and the fair market value of the assets of each such plan (excluding for these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

(ww) *Forward Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) (a “**Forward Looking Statement**”) contained in the Registration Statement, Disclosure Package and the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith. The Forward Looking Statements incorporated by reference in the Registration Statement, Disclosure Package and the Prospectus from the Company’s Annual Report on Form 10-K for the fiscal year most recently ended (i) are within the coverage of the safe harbor for forward looking statements set forth in Section 27A of the Securities Act, Rule 175(b) under the Securities Act or Rule 3b-6 under the Exchange Act, as applicable, and (ii) have been prepared in accordance with Item 10 of Regulation S-K under the Securities Act.

(xx) *Margin Rules.* Neither the issuance, sale and delivery of the Shares nor the application of the proceeds thereof by the Company as described in the Registration Statement, Disclosure Package and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(yy) *Insurance.* The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; the Company has not been refused any insurance coverage sought or applied for; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not be reasonably be likely to have a Material Adverse Effect.

(zz) *No Improper Practices.* (i) Neither the Company, nor to the Company's knowledge, any of its executive officers has, in the past five years, made any unlawful contributions to any candidate for any political office (or failed fully to disclose any contribution in violation of law) or made any contribution or other payment to any official of, or candidate for, any federal, state, municipal, or foreign office or other person charged with similar public or quasi-public duty in violation of any law or of the character required to be disclosed in the Prospectus; (ii) no relationship, direct or indirect, exists between or among the Company or, to the Company's knowledge any affiliate, on the one hand, and the directors, officers and stockholders of the Company, on the other hand, that is required by the Securities Act to be described in the Registration Statement, Disclosure Package and the Prospectus that is not so described; (iii) no relationship, direct or indirect, exists between or among the Company or any affiliate, on the one hand, and the directors, officers, stockholders or directors of the Company, on the other hand, that is required by the rules of FINRA to be described in the Registration Statement, Disclosure Package and the Prospectus that is not so described; and (iv) except as described in the Prospectus, there are no material outstanding loans or advances or material guarantees of indebtedness by the Company to or for the benefit of any of its officers or directors or any of the members of the families of any of them.

(aaa) *Status Under the Securities Act.* The Company was not and is not an ineligible issuer as defined in Rule 405 under the Securities Act at the times specified in Rules 164 and 433 under the Securities Act in connection with the offering of the Shares.

(bbb) *No Misstatement or Omission.* The Incorporated Documents and each Issuer Free Writing Prospectus as of the Time of Sale, did not or will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representation or warranty with respect to any statement contained in any Issuer Free Writing Prospectus in reliance upon and in conformity with information concerning the Underwriter and furnished by the Underwriter to the Company expressly for use in the Issuer Free Writing Prospectus.

(ccc) *No Conflicts.* Neither the execution of this Agreement, nor the issuance, offering or sale of the Shares, nor the consummation of any of the transactions contemplated herein and therein, nor the compliance by the Company with the terms and provisions hereof and thereof will conflict with, or will result in a breach of, any of the terms and provisions of, or has constituted or will constitute a default under, or has resulted in or will result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any contract or other agreement to which the Company may be bound or to which any of the property or assets of the Company is subject, except (i) such conflicts, breaches or defaults as may have been waived and (ii) such conflicts, breaches and defaults that would not have a Material Adverse Effect; nor will such action result (x) in any violation of the provisions of the organizational or governing documents of the Company, or (y) in any material violation of the provisions of any statute or any order, rule or regulation applicable to the Company or of any court or of any federal, state or other regulatory authority or other government body having jurisdiction over the Company.

(ddd) *Stock Transfer Taxes.* On the Closing Date, all stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Shares to be sold hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been fully complied with.

Any certificate signed by any officer of the Company and delivered to the Underwriter or to counsel for the Underwriter in connection with the Offering of the Shares shall be deemed a representation and warranty by the Company to the Underwriter as to the matters covered thereby.

2. *Purchase, Sale and Delivery of Offered Shares.*

(a) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to sell to the Underwriter, and the Underwriter agrees to purchase from the Company, the number of Shares set forth opposite the name of the Underwriter in Schedule I hereto at a purchase price of \$3.90 per share (the "**Purchase Price**").

(b) The Company will deliver the Shares to the Underwriter through the facilities of The Depository Trust Company, issued in such names and in such denominations as the Underwriter may direct by notice in writing to the Company given at or prior to 12:00 p.m., New York time, on the second (2nd) full business day preceding the Closing Date against payment of the aggregate Purchase Price therefor by wire transfer in federal (same day) funds to an account at a bank designated and payable to the order of the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligations of the Underwriter hereunder. The time and date of the delivery and closing shall be at 10:00 a.m., New York time, on February 10, 2015. The time and date of such payment and delivery are herein referred to as the "Closing Date". The Closing Date and the location of delivery of, and the form of payment for, the Shares may be varied by agreement between the Company and the Underwriter.

The Company is advised by the Underwriter that the Underwriter intend (i) to make a public offering of the Shares as soon after the effectiveness of this Agreement as in the Underwriter's judgment is advisable and (ii) initially offer the Shares upon the terms set forth in the Prospectus. The Underwriter may from time to time increase or decrease the public offering price after the initial public offering to such extent as the Underwriter may determine.

3. *Certain Agreements of the Company.* The Company agrees with the Underwriter that, as of the date hereof and as of the Closing Date:

(a) *Filing of Prospectuses.* The Company has filed or will file each Statutory Prospectus and the Prospectus pursuant to and in accordance with Rule 424(b)(2) (or, if applicable and consented to by the Underwriter, subparagraph (5)) not later than the second business day following the earlier of the date it is first used or the execution and delivery of this Agreement. The Company has complied and will comply with Rule 433.

(b) *Filing of Amendments; Response to Commission Requests.* The Company will promptly advise the Underwriter of any proposal to amend or supplement the Registration Statement or any Statutory Prospectus at any time and will offer the Underwriter a reasonable opportunity to comment on any such amendment or supplement; and the Company will also advise the Underwriter promptly of (i) the filing of any such amendment or supplement or the distribution of any Written Testing-the-Waters Communications, (ii) any request by the Commission or its staff for any amendment to the Registration Statement, for any supplement to any Statutory Prospectus or for any additional information, (iii) the institution by the Commission of any stop order proceedings in respect of the Registration Statement or the threatening of any proceeding for that purpose or suspension of any Written Testing-the-Waters Communications, and (iv) the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares in any jurisdiction or the institution or threatening of any proceedings for such purpose. The Company will use its commercially reasonable efforts to prevent the issuance of any such stop order or the suspension of any such qualification and, if issued, to obtain as soon as possible the withdrawal thereof.

(c) *Continued Compliance with Securities Laws.* If, at any time when a prospectus relating to the Shares is (or but for the exemption in Rule 172 would be) required to be delivered under the Securities Act by the Underwriter or dealers, any event occurs as a result of which the Prospectus or any Written Testing-the-Waters Communications as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or if it is necessary at any time to amend the Registration Statement or supplement the Prospectus to comply with the Securities Act, the Company will promptly notify the Underwriter of such event and will promptly prepare and file with the Commission and furnish, at its own expense, to the Underwriter and the dealers and any other dealers upon request of the Underwriter, an amendment or supplement which will correct such statement or omission or an amendment which will effect such compliance. Neither the Underwriter's consent to, nor the Underwriter's delivery of, any such amendment or supplement shall constitute a waiver of any of the conditions set forth in Section 5 hereof.

(d) *Rule 158.* As soon as practicable, but not later than 16 months, after the date of this Agreement, the Company will make generally available to its security holders an earnings statement (which need not be audited) covering a period of at least 12 months beginning after the date of this Agreement and satisfying the provisions of Section 11(a) of the Securities Act and Rule 158.

(e) *Furnishing of Prospectuses.* The Company will furnish to the Underwriter copies of the Registration Statement, including all exhibits, any Statutory Prospectus, the Prospectus and all amendments and supplements to such documents, in each case as soon as available and in such quantities as the Underwriter reasonably request. The Company will pay the expenses of printing and distributing to the Underwriter all such documents.

(f) *Blue Sky Qualifications.* The Company will arrange for the qualification of the Shares for sale under the laws of such jurisdictions as the Underwriter designate and will continue such qualifications in effect so long as required for the distribution; provided that such obligation to qualify the Shares for sale shall not include the obligation to register the Shares in any such jurisdiction in the event that counsel for the Company reasonably determines that such registration is not required pursuant to Section 18 of the Securities Act; and provided further that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified, to register or qualify as a dealer in securities or to take any action that would subject it to service of process in any jurisdiction, other than those arising out of the offering or sale of the Shares, in any jurisdiction where it is not now so subject.

(g) *Reporting Requirements.* For so long as the Shares remain outstanding, the Company will furnish to the Underwriter as soon as practicable after the end of each fiscal year, a copy of its annual report to stockholders for such year; and the Company will furnish to the Underwriter (i) as soon as available, a copy of each report and any definitive proxy statement of the Company filed with the Commission under the Exchange Act or mailed to stockholders; and (ii) from time to time, such other information concerning the Company as the Underwriter may reasonably request. However, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act and is filing reports with the Commission on EDGAR, it is not required to furnish such reports or statements to the Underwriter.

(h) *Payment of Expenses.* The Company will pay all expenses incident to the performance of its obligations under this Agreement, including but not limited to any filing fees and other expenses incurred in connection with qualification of the Shares for sale under the laws of such jurisdictions as the Underwriter designate and the preparation and printing of memoranda relating thereto, any fees charged by investment rating agencies for the rating of the Shares, costs and expenses relating to investor presentations or any “road show” in connection with the offering and sale of the Shares, including, without limitation, any travel expenses of the Company’s officers and employees and any other expenses of the Company including the chartering of airplanes, expenses incurred in distributing preliminary prospectuses and the Prospectus (including any amendments and supplements thereto) to the Underwriter and for expenses incurred for preparing, printing and distributing any Issuer Free Writing Prospectuses to investors or prospective investors, all fees and expenses incurred in connection with any filing for the review of the Offering by FINRA, and the fees and disbursements of counsel for the Underwriter in connection with the Offering up to a maximum of \$40,000.

(i) *Use of Proceeds.* The Company will use the net proceeds received in connection with this Offering in the manner described in the “**Use of Proceeds**” section of the Registration Statement, Disclosure Package and the Prospectus and, except as disclosed in the Disclosure Package and the Prospectus, the Company does not intend to use any of the proceeds from the sale of the Shares hereunder to repay any outstanding debt owed to any affiliate of the Underwriter.

(j) *Absence of Manipulation.* The Company will not take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, stabilization or manipulation of the price of any securities of the Company to facilitate the sale or resale of the Shares.

(k) *Lock-Up Agreements.* The Company has caused each person or entity listed on Schedule IV to execute and deliver to the Underwriter, on or prior to the date of this Agreement, a written agreement substantially in the form attached hereto as Exhibit A.

(l) *Emerging Growth Company Status.* The Company will promptly notify the Underwriter if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) the completion of the distribution of the Shares within the meaning of the Securities Act and (ii) completion of the 90-day restricted period referred to in Section 1(ss) hereof.

(m) *Exchange Listing.* The Company will use its best efforts to list the Shares on the NYSE MKT LLC.

4. *Free Writing Prospectuses.*

(a) *Issuer Free Writing Prospectuses.* The Company represents and agrees that, unless it obtains the prior consent of the Underwriter, and the Underwriter represent and agree that, unless they obtain the prior consent of the Company and the Underwriter, they have not made and will not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus, or that would otherwise constitute a “free writing prospectus,” as defined in Rule 405, required to be filed with the Commission. Any such free writing prospectus consented to by the Company and the Underwriter is hereinafter referred to as a “**Permitted Free Writing Prospectus.**” The Company represents that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an “issuer free writing prospectus,” as defined in Rule 433, and has complied and will comply with the requirements of Rules 164 and 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping.

(b) *Term Sheets.* The Company will, if necessary, prepare a final term sheet relating to the Shares, containing only information that describes the final terms of the Shares and otherwise in a form consented to by the Underwriter, and will file such final term sheet within the period required by Rule 433(d)(5)(ii) following the date such final terms have been established for all classes of the offering of the Shares. Any such final term sheet is an Issuer Free Writing Prospectus and a Permitted Free Writing Prospectus for purposes of this Agreement. The Company also consents, following review and approval by the Company, to the use by the Underwriter of a free writing prospectus that contains only (i) (x) information describing the preliminary terms of the Shares or the offering, (y) information permitted by Rule 134, or (z) information that describes the final terms of the Shares or the offering and that is included in the final term sheet of the Company contemplated in the first sentence of this subsection or (ii) other information that is not “issuer information,” as defined in Rule 433, it being understood that any such free writing prospectus referred to in clause (i) or (ii) above shall not be an Issuer Free Writing Prospectus for purposes of this Agreement.

5. *Conditions of the Obligations of the Underwriter.* The obligations of the Underwriter hereunder will be subject to the accuracy of the representations and warranties of the Company herein (as though made on and as of the Closing Date), to the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

(a) *Accountants' Comfort Letters.*

(i) On the date hereof, the Underwriter shall have received a letter dated the date hereof (the "**Comfort Letter**") from each Accountant, addressed to the Underwriter and in form and substance satisfactory to the Underwriter and its counsel.

(ii) At the Closing Date, the Underwriter shall have received from each Accountant a letter (the "**Bring-Down Letter**"), dated as of such date, addressed to the Underwriter and in form and substance satisfactory to the Underwriter and its counsel.

(b) *Filing of Prospectus.* The Prospectus shall have been filed with the Commission in accordance with the Rules and Regulations and Section 3(a) hereof.

(c) *No Stop Orders.* Prior to the Closing Date: (i) no stop order suspending the effectiveness of the Registration Statement or any part thereof, preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus or any part thereof shall have been issued under the Securities Act, and no proceedings for that purpose or pursuant to Section 8A under the Securities Act shall have been initiated or threatened by the Commission, (ii) no order suspending the qualification or registration of the Shares under the securities or blue sky laws of any jurisdiction shall be in effect and (iii) all requests for additional information on the part of the Commission (to be included or incorporated by reference in the Registration Statement, the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus or otherwise) shall have been complied with to the reasonable satisfaction of the Underwriter. On or prior to the Closing Date, the Registration Statement or any amendment thereof or supplement thereto shall not contain an untrue statement of material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and neither the Disclosure Package, nor any Issuer Free Writing Prospectus nor the Prospectus nor any amendment thereof or supplement thereto shall contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

(d) *Action Preventing Issuance.* No action shall have been taken and no law, statute, rule, regulation or order shall have been enacted, adopted or issued by any governmental agency or body which would prevent the issuance or sale of the Shares or materially and adversely affect or potentially materially and adversely affect the business or operations of the Company; and no injunction, restraining order or order of any other nature by any federal or state court of competent jurisdiction shall have been issued which would prevent the issuance or sale of the Shares or materially and adversely affect or potentially materially and adversely affect the business or operations of the Company.

(e) *No Material Adverse Change.* Subsequent to the date of the latest audited financial statements included or incorporated by reference in the Disclosure Package, (i) neither the Company nor any of its subsidiaries shall have sustained any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth in the Disclosure Package, (ii) there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or the conversion of convertible indebtedness), or material change in the short-term debt or long-term debt of the Company, or any change or any development involving a prospective change in or affecting the business, assets, general affairs, management, financial position, stockholders' equity or results of operations of the Company, otherwise than as set forth in the Disclosure Package, the effect of which, in any such case described in clause (i) or (ii) of this subsection (e), is, in the reasonable judgment of the Underwriter, so material and adverse as to make it impracticable or inadvisable to proceed with the sale or delivery of the Shares on the terms and in the manner contemplated in the Disclosure Package.

(f) *Representations and Warranties.* Each of the representations and warranties of the Company contained herein shall be true and correct when made on and as of the Closing Date, as if made on such date (except that (i) those representations and warranties that address matters only as of a particular date shall remain true and correct as of such date and (ii) those representations and warranties which are, by their express terms, qualified by materiality, Material Adverse Effect, shall be true and correct as so qualified), and all covenants and agreements herein contained to be performed on the part of the Company and all conditions herein contained to be fulfilled or complied with by the Company at or prior to the Closing Date shall have been duly performed, fulfilled or complied with in all material respects.

(g) *Opinion of Counsel for Company.* The Underwriter shall have received from Dentons US LLP, counsel to the Company, such counsels' written opinions, addressed to the Underwriter and dated as of the Closing Date, in form and substance satisfactory to the Underwriter and its counsel. Such counsel to the Company shall also have furnished to the Underwriter a written statement ("**Negative Assurances**"), addressed to the Underwriter and dated as of the Closing Date, in form and substance satisfactory to the Underwriter and its counsel.

(h) *Opinion of Counsel for Underwriter.* The Underwriter shall have received from LeClairRyan, A Professional Corporation, counsel for the Underwriter, such opinion or opinions, dated as of the Closing Date, with respect to such matters as the Underwriter may reasonably require, and the Company shall have furnished to such counsel such documents as it requests to enable it to pass upon such matters.

(i) *Officer's Certificate.* The Underwriter shall have received on the Closing Date a certificate, addressed to the Underwriter and dated as of the Closing Date, of the chief executive or chief operating officer and the chief financial officer or chief accounting officer of the Company to the effect that:

(i) each of the representations, warranties and agreements of the Company contained in this Agreement were true and correct when originally made and are true and correct as of the Time of Sale and as of the Closing Date, as the case may be, as if made on each such date (except that (i) those representations and warranties that address matters only as of a particular date remain true and correct as of each such date and (ii) those representations and warranties which are, by their express terms, qualified by materiality, Material Adverse Effect, shall be true and correct as so qualified); and the Company has, in all material respects, complied with all agreements and satisfied all the conditions on its part required under this Agreement to be performed or satisfied at or prior to the Closing Date;

(ii) there has not been, subsequent to the date of the most recent audited financial statements included or incorporated by reference in the Disclosure Package, any Material Adverse Effect except as set forth in the Prospectus;

(iii) no stop order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Shares for offering or sale, nor suspending or preventing the use of the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus shall have been issued, and no proceedings for that purpose or pursuant to Section 8A under the Securities Act shall be pending or to their knowledge, threatened by the Commission or any state or regulatory body;

(iv) the Registration Statement and each amendment thereto, at the Time of Sale and as of the date of this Agreement and as of the Closing Date did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Disclosure Package, as of the Time of Sale and as of the Closing Date, any Issuer Free Writing Prospectus as of its date and as of the Closing Date, the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of the Closing Date, did not include any untrue statement of a material fact and did not omit 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 in which they were made, not misleading; and

(v) no event has occurred as a result of which it is necessary to amend or supplement the Registration Statement, the Prospectus or the Disclosure Package in order to make the statements therein not untrue or misleading in any material respect, and in the case of the Prospectus and Disclosure Package, in the light of the circumstances in which they were made.

(j) *Secretary's Certificate.* The Underwriter shall have received on the Closing Date, dated as of the Closing Date, a certificate of the secretary of the Company, in form and substance reasonably satisfactory to counsel for the Underwriter and customary for the type of offering contemplated by this Agreement.

(k) *IP Certificate.* The Underwriter shall have received on the Closing Date a certificate, dated as of the Closing Date, of the executive officer of the Company responsible for intellectual property matters, in form and substance satisfactory to the Underwriter.

(l) *FDA Certificate.* The Underwriter shall have received on the Closing Date a certificate, dated as of the Closing Date, of the executive officer of the Company responsible for regulatory matters, in form and substance satisfactory to the Underwriter.

(m) *Lock-Up Agreements.* The Lock-Up Agreements shall be in full force and effect.

(n) *Exchange Listing.* The Shares to be delivered on the Closing Date shall have been approved for listing on the NYSE MKT LLC, subject to official notice of issuance.

(o) *Additional Documents.* The Company shall have furnished to the Underwriter such further information, certificates or documents as the Underwriter shall have reasonably requested.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriter.

6. *Indemnification and Contribution.*

(a) *Indemnification of Underwriter.* The Company will indemnify and hold harmless the Underwriter, and its partners, members, directors, officers, employees, agents, affiliates and each person, if any, who controls the Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (each, an "**Indemnified Party**"), against any and all losses, claims, damages or liabilities, joint or several, to which such Indemnified Party may become subject, under the Securities Act, the Exchange Act, other federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of the Registration Statement at any time, any Statutory Prospectus as of any time, the Prospectus or any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communications, or arise out of or are based upon the omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, and in the case of the Statutory Prospectus, the Prospectus or any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communications, in light of the circumstances in which they were made, and will reimburse each Indemnified Party for any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending against any loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Indemnified Party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to any of the above as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement in or omission or alleged omission from any of such documents in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Underwriter specifically for use therein, it being understood and agreed that the only such information furnished by or on behalf of the Underwriter consists of the information described as such in subsection (b) below.

(b) *Indemnification of Company.* The Underwriter will indemnify and hold harmless the Company and its directors and officers who sign a Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (each, an “**Underwriter Indemnified Party**”), against any losses, claims, damages or liabilities to which the Underwriter Indemnified Party may become subject, under the Securities Act, the Exchange Act, other federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of the Registration Statement at any time, any Statutory Prospectus as of any time, the Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communications, or arise out of or are based upon the omission or the alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, and in the case of the Statutory Prospectus, the Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communications, in light of the circumstances in which they were made, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Underwriter or its representatives specifically for use therein, and will reimburse any legal or other expenses reasonably incurred by the Underwriter Indemnified Party in connection with investigating or defending against any such loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not the Underwriter Indemnified Party is a party thereto), whether threatened or commenced, based upon any such untrue statement or omission, or any such alleged untrue statement or omission as such expenses are incurred, it being understood and agreed that the only such information furnished to the Company by or on behalf of the Underwriter consists of the following information (the “**Underwriter’s Information**”): the statements contained in the fifth, twelfth and fourteenth paragraphs of the Prospectus under the caption “**Underwriting.**”

(c) *Actions against Parties; Notification.* Promptly after receipt by an indemnified party under this Section 6(c) of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under subsection (a) or (b) above, notify the indemnifying party of the commencement thereof; but the failure to notify the indemnifying party shall not relieve it from any liability that it may have under subsection (a) or (b) above except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure. In case any such action is brought against any indemnified party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate therein and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel selected by the indemnifying party and reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party will not be liable to such indemnified party under this Section 6(c) for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel) reasonably acceptable to the indemnifying party, and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest; (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party; (iii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action; or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party; provided, however, the indemnifying party shall not be responsible for paying the fees, costs and expenses for more than one separate counsel for all indemnified parties in any one jurisdiction. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened action in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party unless such settlement includes an unconditional release of such indemnified party from all liability on any claims that are the subject matter of such action.

(d) *Contribution.* If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriter on the other from the offering of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriter on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriter on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses but after deducting underwriting discounts and commissions) received by the Company bear to the total underwriting discounts and commissions received by the Underwriter. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriter and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), the Underwriter shall not be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by such Underwriter and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue statement or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

7. *Termination.*

(a) The Underwriter shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time in writing at or prior to the first Closing Date without liability on the part of the Underwriter to the Company, if (i) prior to delivery and payment for any Shares (A) trading in securities generally shall have been suspended on or by the New York Stock Exchange LLC, the NYSE MKT LLC, or NASDAQ or in the over the counter market (each, a "**Trading Market**"), (B) trading in any of the securities of the Company shall have been suspended on any exchange, in the over-the-counter market or by the Commission, (C) a general moratorium on commercial banking activities shall have been declared by federal or New York state authorities or a material disruption shall have occurred in commercial banking or securities settlement or clearance services in the United States, (D) there shall have occurred any outbreak or material escalation of hostilities or acts of terrorism involving the United States or there shall have been a declaration by the United States of a national emergency or war, (E) there shall have occurred any other calamity or crisis or any material change in general economic, political or financial conditions in the United States, if the effect of any such event specified in clause (D) or (E), in the judgment of the Underwriter, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of the Shares, at the Closing Date, on the terms and in the manner contemplated by this Agreement, the Registration Statement, Disclosure Package and the Prospectus, (ii) since the time of execution of this Agreement or the earlier respective dates as of which information is given in the Disclosure Package or incorporated by reference therein, there has been any Material Adverse Effect, (iii) the Company shall have failed, refused or been unable to comply with the terms of or perform any agreement or obligation under this Agreement in any material respect, other than by reason of a default by the Underwriter, or (iv) any condition to the Underwriter's obligations hereunder is not fulfilled in any material respect (except to the extent the Underwriter, on behalf of the Underwriter, shall have waived such condition).

(b) If this Agreement is terminated in accordance with Section 7(a) or the purchase of the Shares pursuant to the terms of this Agreement is not consummated for any reason, the Company will reimburse the Underwriter for all reasonable documented out-of-pocket expenses (including reasonable fees and disbursements of counsel) incurred by them in connection with the offering of the Shares, and the Company will have no further obligation or liability hereunder except as set forth in Sections 6, and 7 hereof, and the Underwriter will have no further obligation or liability hereunder except as set forth in Section 6 hereof.

8. *Survival of Certain Representations and Obligations.* The respective indemnities, agreements, representations, warranties and other statements of the Company or its officers and of the Underwriter set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation, or statement as to the results thereof, made by or on behalf of the Underwriter, the Company or any of their respective representatives, officers or directors or any controlling person, and will survive delivery of and payment for the Shares.

9. *Notices.* All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing and if sent to the Underwriter, shall be mailed, delivered or sent by electronic mail or facsimile and confirmed to:

MLV & Co. LLC
1251 Avenue of the Americas, 41st Floor
New York, New York 10020
Attention: President
Email: dcolucci@mlvco.com
Facsimile No.: (212) 317-1515

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

LeClairRyan, A Professional Corporation
885 Third Avenue
Sixteenth Floor
New York, New York 10022

Attention: James T. Seery
Email: james.seery@leclairryan.com
Facsimile No.: (973) 491-3415

and if to the Company, shall be mailed, delivered or telegraphed and confirmed to:

Asterias Biotherapeutics, Inc.
230 Constitution Drive
Menlo Park, California 94025
Attn: Chief Executive Officer
Facsimile No.: (650) 433-2998

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

Dentons US LLP
1221 Avenue of the Americas
New York, New York 10020
Attn: Jeffrey A. Baumel
Email: jeffrey.baumel@dentons.com
Facsimile No.: (212) 768-6800

Any such statements, requests, notices or agreements shall be effective only upon receipt. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

10. *Successors.* This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and controlling persons referred to in Section 6, and no other person will have any right or obligation hereunder.

11. *Counterparts.* This Agreement may be executed electronically in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

12. *Absence of Fiduciary Relationship.* The Company acknowledges and agrees that:

(a) *No Other Relationship.* The Underwriter has been retained solely to act as underwriter in connection with the sale of Shares and that no fiduciary, advisory or agency relationship between the Company and the Underwriter has been created in respect of any of the transactions contemplated by this Agreement or the Prospectus, irrespective of whether the Underwriter has advised or are advising the Company on other matters;

(b) *Arms' Length Negotiations.* The price of the Shares set forth in this Agreement was established by the Company following discussions and arms-length negotiations with the Underwriter, and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) *Absence of Obligation to Disclose.* The Company has been advised that the Underwriter and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Underwriter has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(d) *Waiver.* The Company waives, to the fullest extent permitted by law, any claims it may have against the Underwriter for breach of fiduciary duty or alleged breach of fiduciary duty and agrees that the Underwriter shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

13. *Applicable Law.* This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

14. *Submission to Jurisdiction.* The Company and the Underwriter hereby submit to the non-exclusive jurisdiction of the federal and state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company and the Underwriter irrevocably and unconditionally waive any objection to the laying of venue of any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby in federal and state courts in the Borough of Manhattan in The City of New York and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit or proceeding in any such court has been brought in an inconvenient forum.

15. *Entire Agreement.* This Agreement constitutes the entire agreement of the parties to this Agreement with respect to the Company's offering, issuance and sale of the Shares and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof.

[Remainder of page intentionally left blank.]

If the foregoing is in accordance with the Underwriter's understanding of our agreement, kindly sign and return to the Company one of the counterparts hereof, whereupon it will become a binding agreement among the Company and the Underwriter in accordance with its terms.

Very truly yours,

ASTERIAS BIOTHERAPEUTICS, INC.

By: /s/ Pedro Lichtinger

Name: Pedro Lichtinger

Title: Chief Executive Officer

The foregoing Underwriting Agreement is hereby confirmed and accepted as of the date first above written.

MLV & CO. LLC

By: /s/ Dean Colucci

Name: Dean Colucci

Title: President

SCHEDULE I

Underwriter	Shares
MLV & Co. LLC	384,615
Total	384,615

SCHEDULE II

1. General Use Free Writing Prospectuses (included in the Disclosure Package):

None.

2. Other Information Included in the Disclosure Package:

None.

SCHEDULE III

Pricing Information

Shares to be sold: 384,615

Public Offering Price Per Share: 3.90

Underwriting Discount Per Share: \$0.273

Estimated Net Proceeds to the Company, before expenses: \$1,394,999

SCHEDULE IV

List of Each Person and Entity Executing a Lock-Up Agreement

Katharine E. Spink
Richard T. LeBuhn
Madelyn Marino
Andrew Arno
Casey Case
Edward D. Wirth, III
Jane Lebkowski
Robert Peabody
Pedro Lichtinger
Natale S. Ricciardi
Michael West
Alfred Kingsley
Judith Segall
BioTime, Inc.
Romulus Films Ltd.

SCHEDULE V

Subsidiaries

None.

Form of Lock-Up Agreement

Name

, 2015

MLV & CO. LLC
As Representative of the several Underwriters
1251 Avenue of the Americas, 41st Floor
New York, NY 10020

Re: Proposed Offering of Series A Common Stock by Asterias Biotherapeutics, Inc.

Dear Sirs:

This Agreement is being delivered to you in connection with the proposed Underwriting Agreement (the "Underwriting Agreement") between Asterias Biotherapeutics, Inc., a Delaware corporation (the "Company") and MLV & Co. LLC ("MLV"), as representative of a group of underwriters (collectively, the "Underwriters"), to be named therein, and the other parties thereto (if any), relating to the proposed offering comprised of shares of the Company's Series A common stock, par value \$0.0001 per share (the "Common Stock").

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, and in light of the benefits that the offering of the Common Stock will confer upon the undersigned in its capacity as a securityholder and/or an officer, director or employee of the Company, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each Underwriter that, during the period beginning on the date hereof through and including the date that is the 60th day after the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not, without the prior written consent of MLV, directly or indirectly, (i) sell, offer to sell, contract or agree to sell, hypothecate, assign, transfer, pledge, grant any option to purchase or otherwise dispose of, or announce the intention to otherwise dispose of, directly or indirectly, any shares of Common Stock (including, without limitation, Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations promulgated under the Securities Act of 1933, as amended, (the "Securities Act") as the same may be amended or supplemented from time to time (such shares, the "Beneficially Owned Shares")) or securities convertible into or exercisable or exchangeable for Common Stock, or any warrants or other rights to purchase, the foregoing (ii) enter into any swap, hedge or similar agreement or arrangement that transfers in whole or in part, the economic risk of ownership of the Beneficially Owned Shares or securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or (iii) engage in any short selling of the Common Stock or securities convertible into or exercisable or exchangeable for Common Stock, or (iv) publicly announce an intention to effect any transaction specified in clause (i) or (ii) above.

Notwithstanding the foregoing, but only to the extent that the rules of the Financial Industry Regulatory Authority relating to the following extensions (or any successor rules) are applicable to the Company and in effect, and only if the Company loses its status as an “emerging growth company,” if (i) the Company issues an earnings release or material news or a material event relating to the Company occurs during the last 17 days of the Lock-Up Period, or (ii) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, the Lock-Up Period shall be extended and the restrictions imposed by this Agreement shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

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

- (1) if the undersigned is a natural person, any transfers made by the undersigned (a) as a bona fide gift to any member of the immediate family (as defined below) of the undersigned or to a trust the beneficiaries of which are exclusively the undersigned or members of the undersigned’s immediate family, (b) by will or intestate succession upon the death of the undersigned or (c) as a bona fide gift to a charity or educational institution,
- (2) if the undersigned is a corporation, partnership, limited liability company or other business entity, any transfers to any shareholder, partner or member of, or owner of a similar equity interest in, the undersigned, as the case may be, if, in any such case, such transfer is not for value, and
- (3) if the undersigned is a corporation, partnership, limited liability company or other business entity, any transfer made by the undersigned (a) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the undersigned’s capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned’s assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by this agreement or (b) to another corporation, partnership, limited liability company or other business entity so long as the transferee is an affiliate (as defined below) of the undersigned and such transfer is not for value;

provided, however, that in the case of any transfer described in clause (1), (2) or (3) above, it shall be a condition to the transfer that (A) the transferee executes and delivers to MLV, acting on behalf of the Underwriters, not later than one business day prior to such transfer, a written agreement, in substantially the form of this agreement (it being understood that any references to “immediate family” in the agreement executed by such transferee shall expressly refer only to the immediate family of the undersigned and not to the immediate family of the transferee) and otherwise satisfactory in form and substance to MLV, and (B) if the undersigned is required to file a report under Section 16(a) of the Securities Exchange Act of 1934, as amended, reporting a reduction in beneficial ownership of shares of Common Stock or Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or Beneficially Owned Shares during the Lock-Up Period (as the same may be extended as described above), the undersigned shall include a statement in such report to the effect that, in the case of any transfer pursuant to clause (1) above, such transfer is being made as a gift or by will or intestate succession or, in the case of any transfer pursuant to clause (2) above, such transfer is being made to a shareholder, partner or member of, or owner of a similar equity interest in, the undersigned and is not a transfer for value or, in the case of any transfer pursuant to clause (3) above, such transfer is being made either (a) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the undersigned’s capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned’s assets or (b) to another corporation, partnership, limited liability company or other business entity that is an affiliate of the undersigned and such transfer is not for value. For purposes of this paragraph, “immediate family” shall mean a spouse, child, grandchild or other lineal descendant (including by adoption), father, mother, brother or sister of the undersigned; and “affiliate” shall have the meaning set forth in Rule 405 under the Securities Act.

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

The undersigned further agrees that (i) it will not, during the Lock-Up Period (as the same may be extended as described above), make any demand or request for or exercise any right with respect to the registration under the Securities Act, of any shares of Common Stock or other Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or other Beneficially Owned Shares, (ii) the Company may, with respect to any Common Stock or other Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or other Beneficially Owned Shares owned or held (of record or beneficially) by the undersigned, cause the transfer agent or other registrar to enter stop transfer instructions and implement stop transfer procedures with respect to such securities during the Lock-Up Period (as the same may be extended as described above), and (iii) will not, directly or indirectly, take, any action designed, or which has constituted or will constitute or might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of shares of Common Stock.

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

The undersigned acknowledges and agrees that whether or not any offering of Common Stock actually occurs depends on a number of factors, including market conditions.

Very truly yours,

(Name of Stockholder - Please Print)

(Signature)

(Name of Signatory if Stockholder is an entity - Please Print)

(Title of Signatory if Stockholder is an entity - Please Print)

Address:

SUBSCRIPTION AGREEMENT

THIS SUBSCRIPTION AGREEMENT (this "**Agreement**") is made as of February 4, 2015 by and between Asterias Biotherapeutics, Inc., a Delaware corporation (the "**Company**"), and the investor listed on Schedule A hereto (each, an "**Investor**" and together, the "**Investors**").

AGREEMENT

In consideration for the mutual promises and covenants herein, the parties agree as follows:

WHEREAS, the Company is offering up to approximately three million shares of its Series A Common Stock, par value \$0.0001 per share (the "**Series A Shares**") for \$__ per share (the "**Purchase Price**"), in an overnight underwritten public offering;

WHEREAS, the Company is hereby simultaneously offering its Series A Shares at a price per share equal to the Purchase Price in a private placement to a limited number of accredited investors, including certain of its officers, directors and affiliates; and

WHEREAS, the undersigned desires to subscribe for and purchase the number of Series A Shares set forth on Schedule A hereto.

SECTION 1 - PURCHASE AND SALE OF SERIES A SHARES

1.1 Purchase and Sale of Series A Shares. The Company has authorized the issuance and sale, in accordance with the terms hereof, of its Series A Shares. On the terms and subject to the conditions set forth in this Agreement, at the Closing (as defined below), the Company agrees to issue to each Investor, and the Investor agrees to purchase from the Company, such number of Series A Shares as is set forth on the line marked "Number of Series A Shares Purchased" on Schedule A (the "**Purchased Shares**"). The Company will sell Series A Shares to more than one Investor, each of whom will enter into Subscription Agreement substantially identical to this one.

1.2 Closing. The purchase and sale of the Series A Shares shall take place at the closing (the "**Closing**") which shall take place remotely via exchange of documents and signatures at 10:00 a.m. Eastern Time three business days immediately following execution and delivery of this Agreement, or at such other place and time as may be agreed to among the Company and the Investors. At the Closing, the Company shall deliver to each of the Investors purchasing Series A Shares a certificate or certification representing such number of Purchased Shares, against receipt of a check subject to collection or a wire transfer in immediately available funds of the purchase price, to an account designated by the Company.

**SECTION 2 - REPRESENTATIONS AND WARRANTIES
OF THE COMPANY**

The Company represents and warrants to each Investor as follows:

2.1 Existence of Company. The Company is a duly organized Delaware corporation. The Company is validly existing in all jurisdictions where it conducts its business.

2.2 Authority to Execute. The execution, delivery and performance by the Company of this Agreement and the issuance of the Series A Shares are within the Company's corporate powers, have been duly authorized by all necessary corporate action, do not and will not conflict with any provision of law or organizational document of the Company (including its Certificate of Incorporation or Bylaws) or of any agreement or contractual restrictions binding upon or affecting the Company or any of its property and need no further stockholder or creditor consent.

2.3 No Stockholder Approval Required. No approval of the Company's stockholders is required for (i) the entry by the Company into this Agreement, or (ii) the issuance of the Series A Shares contemplated by this Agreement.

2.4 Valid Issuance. The Series A Shares will be, validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under, applicable state and federal securities laws and liens or encumbrances created by or imposed by the Investor. Assuming the accuracy of the representations of the Investor in Section 3 of this Agreement, and the Series A Shares will be issued in compliance with all applicable federal and state securities laws.

2.5 Binding Obligation. This Agreement is, a valid and binding obligation of the Company enforceable against the Company in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors' rights generally and to general equitable principles.

2.6 SEC Reports. The Company has filed all forms, reports, schedules, proxy statements, registration statements and other documents (including all exhibits thereto) required to be filed by it with the Securities and Exchange Commission (the "SEC") pursuant to the federal securities laws and the SEC rules and regulations thereunder, together with all certifications required pursuant to the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") (as they have been amended since the time of their filing, including all exhibits thereto, the "SEC Reports"). Each of the SEC Reports complied in all material respects with the applicable requirements of the Securities Act of 1933, as amended (the "Securities Act") and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Sarbanes-Oxley Act and the rules and regulations of the SEC under all of the foregoing. None of the SEC Reports contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

SECTION 3 - REPRESENTATIONS AND WARRANTIES OF THE INVESTORS

Each Investor represents and warrants to the Company as follows:

3.1 Authorization; Binding Obligations. The Investor has full power and authority to enter into this Agreement and this Agreement constitutes a valid and legally binding obligation of the Investor, enforceable against the Investor in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors' rights generally and to general equitable principles.

3.2 Accredited Investor. The Investor is an "accredited investor" within the meaning of SEC Rule 501 of Regulation D promulgated under the Securities Act.

3.3 Investment for Own Account. The Series A Shares are being acquired for the Investor's own account, for investment and not with a view to, or for resale in connection with, any distribution or public offering thereof within the meaning of the Securities Act.

3.4 Knowledge and Experience. The Investor has such knowledge and experience in financial and business matters that (s)he is capable of evaluating the merits and risks of an investment in the Series A Shares and of making an informed investment decision with respect thereto, has the ability and capacity to protect his/her interests and can bear the economic risk of the acceptance of the Series A Shares, including a total loss of his/her investment.

3.5 Opportunity to Ask Questions. The Investor has had the opportunity to ask questions and receive answers from the Company or any authorized person acting on its behalf concerning the Company and its business and to obtain any additional information, to the extent possessed by the Company (or to the extent it could have been acquired by the Company without unreasonable effort or expense) necessary to verify the accuracy of the information received by the Investor. In connection therewith, the Investor acknowledges that the Investor has had the opportunity to discuss the Company's business, management and financial affairs with the Company's management or any authorized person acting on its behalf.

3.6 Receipt of Information. The Investor has received and reviewed all the information concerning the Company and the Series A Shares, both written and oral, that the Investor desires. Without limiting the generality of the foregoing, the Investor has been furnished with or has had the opportunity to acquire, and to review: all information, both written and oral, that the Investor desires with respect to the Company's business, management, financial affairs and prospects. In determining whether to make this investment, the Investor has relied solely on the Investor's own knowledge and understanding of the Company and its business and prospects based upon the Investor's own due diligence investigations and the Company's filings with the SEC.

SECTION 4 - MISCELLANEOUS

4.1 No Waiver; Cumulative Remedies. No failure or delay on the part of any party to this Agreement in exercising any right or remedy under, or pursuant to, this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, remedy or power preclude other or further exercise thereof, or the exercise of any other right, remedy or power. The remedies in this Agreement are cumulative and are not exclusive of any remedies provided by law.

4.2 Amendments and Waivers. Except as otherwise expressly set forth in this Agreement, any term of this Agreement may be amended (either retroactively or prospectively) with the written consent of the Company and the Investor. Any amendment effected in accordance with this Section 4.2 shall be binding upon each Investor, each future holder of the Purchased Shares and the Company.

4.3 Notices, Etc. All notices, requests, consents and other communications hereunder to any party shall be deemed to be sufficient if contained in a written instrument delivered in person; sent by facsimile transmission; sent by electronic mail; duly sent by first class registered or certified mail, return receipt requested, postage prepaid; or duly sent by overnight delivery service (*e.g.*, Federal Express) addressed to such party (i) if to the Company, at the address, fax number or electronic mail address, as applicable, set forth on the signature page hereof or (ii) if to an Investor, at the address, fax number or electronic mail address, as applicable, set forth on Schedule A hereto, or at such other address, fax number or electronic mail address as may hereafter be designated in writing by the addressee to the sender. All such notices, advises and communications shall be deemed to have been received: (a) in the case of personal delivery, on the date of such delivery; (b) in the case of facsimile or electronic mail transmission, on the date of transmission; and (c) in the case of mailing or delivery by service, on the date of delivery as shown on the return receipt or delivery service statement.

4.4 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California or of any other state. The Company and each Investor consent to personal jurisdiction in San Francisco County, California.

4.5 Severability. If any term in this Agreement is held to be illegal or unenforceable, the remaining portions of this Agreement shall not be affected, and this Agreement shall be construed and enforced as if this Agreement did not contain the term held to be illegal or unenforceable.

4.6 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and each Investor and their respective successors and assigns.

4.7 Registration Rights. Following the expiration of the Company's lock-up period as set forth in that certain Underwriting Agreement dated on or about February 4, 2015, by and between the Company and the MLV & Co. LLC, the Company shall use commercially reasonable efforts to (i) file with the SEC a registration statement covering the resale of the Purchased Shares by the Investor, (ii) cause the SEC to declare such registration statement effective, (iii) maintain the effectiveness of such registration statement, and (iv) within a reasonable time following the effectiveness of such registration statement, to cause its stock transfer agent to remove the restrictive legend on the certificate(s) representing the Purchased Shares, provided however, that notwithstanding anything contained herein, the Company shall have the privilege to postpone, for one time only, the filing and/or effectiveness of such registration statement for a reasonable period of time (not exceeding 120 days) if the Company furnishes the Investor with a certificate signed by the Chairman of the Board or the Chief Executive Officer of the Company stating that, in its good faith judgment, the Company's board of directors has determined that filing of the registration statement or causing the SEC to declare the registration statement effective would adversely affect a material financing.

4.8 Transfer of Series A Shares. Notwithstanding the legend required to be placed on the Series A Shares by applicable law, no registration statement shall be necessary: (a) for a transfer of Series A Shares to the respective estate of each Investor or for a transfer of Series A Shares by gift, will or intestate succession of each Investor to his or her spouse or to the siblings, lineal descendants or ancestors each Investor or his or her spouse, if the transferee agrees in writing to be subject to the terms hereof to the same extent as if he or she were the original Investor hereunder; or (b) for a transfer of Series A Shares pursuant to SEC Rule 144 or any successor rule, or for a transfer of Series A Shares pursuant to a registration statement declared effective by the SEC under the Securities Act relating to the Purchased Shares, subject to the condition precedent in case of both (a) and (b) to the Company providing an opinion furnished by the Company's counsel to the effect that such transfer is exempt from the registration requirements of the Securities Act.

4.9 Survival of Representations and Warranties. The representations and warranties of the parties contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement indefinitely, and shall in no way be affected by any investigation of the subject matter thereof made by or on behalf of the other parties.

4.10 California Commissioner of Corporations. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION FOR SUCH SECURITIES PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATIONS BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date first written above.

ASTERIAS BIOTHERAPEUTICS, INC.

By: _____
Name: Pedro Lichtinger
Title: Chief Executive Officer

Address/ E-mail Address for Notice:

230 Constitution Drive
Menlo Park, California 94025
plichtinger@asteriasbio.com

INVESTOR:

By: _____
Name:
Title:

[SIGNATURE PAGE TO SUBSCRIPTION AGREEMENT]

SCHEDULE A

NAME OF INVESTOR (Please Print):

DATE:

ADDRESS FOR NOTICE (Please Print)

Street:

City, State:

Zip Code:

Attention:

(If other than an individual)

Fax:

Home Phone No:

Work Phone No.:

Cellular Phone No.:

E-Mail Address:

SSN/Tax I.D. No:

Number of Series A Shares Purchased:

Aggregate Purchase Price:

\$ _____

