### 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): September 28, 2016

## **ACTINIUM PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

	Delaware	000-52446	74-2963609	
	(State or other jurisdiction	(Commission	(IRS Employer	
	of incorporation)	File Number)	Identification No.)	
_	275 Madison Avenue, 7th Floor New York, NY		10016	
(Address of principal executive offices)		ces)	(Zip Code)	
Registrant's telephone number, including area code: (646) 677-3875 N/A				
(Former name or former address, if changed since last report)				
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):				
	Written communications pursuant to Rule 4	25 under the Securities Act (17 CFR 230.	425)	
	Soliciting material pursuant to Rule 14a-12	under the Exchange Act (17 CFR 240.14a	a -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))

### Item 1.01. Entry into a Material Definitive Agreement.

On September 29, 2016, Actinium Pharmaceuticals, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with H.C. Wainwright & Co. as representative (the "Representative") of the several underwriters party thereto (collectively, the "Underwriters"), relating to the public offering (the "Offering") of 8,000,000 shares of the Company's common stock, \$0.001 par value per share (the "Firm Shares"), at a price to the public of \$1.25 per share (the "Offering Price"), less underwriting discounts. Under the terms of the Underwriting Agreement, the Company has also granted the Underwriters a 30-day option to purchase up to an additional 1,200,000 shares of Common Stock (the "Option Shares" and, together with the Firm Shares") to cover over-allotments, if any, at the Offering Price. The net proceeds to the Company from the sale of the Shares, after deducting the underwriting discounts and other estimated offering expenses payable by the Company, are expected to be approximately \$9,255,000 million assuming no exercise by the Underwriters of their over-allotment option for the Option Shares, or \$10,665,000 million if the Underwriters exercise their over-allotment option for the Option Shares, or \$10,665,000 million if the Underwriters exercise their over-allotment option for the Option Shares on October 4, 2016, subject to the satisfaction of customary closing conditions.

This Offering is being made pursuant to the Company's effective registration statement on Form S-3 (File No. 333-194768) filed with the Securities and Exchange Commission on March 24, 2014, and declared effective on April 17, 2014, and the related preliminary prospectus supplement and prospectus supplement.

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

Pursuant to the Underwriting Agreement, subject to certain exceptions, the Company and its directors and officers have agreed not to sell or otherwise dispose of any of the Company's securities held by them for a period ending 90 days after the date of the final prospectus supplement relating to the Offering without first obtaining the written consent of the Representative.

The foregoing is only a brief description of the material terms of the Underwriting Agreement, does not purport to be a complete description of the rights and obligations of the parties thereunder, and is qualified in its entirety by reference to the Underwriting Agreement that is filed as Exhibit 1.1 to this Current Report on Form 8-K and incorporated by reference herein.

The Underwriting Agreement has been attached hereto as an exhibit to provide investors and security holders with information regarding its terms. It is not intended to provide any other factual information about the Company. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of the Underwriting Agreement and as of specific dates, were solely for the benefit of the parties to the Underwriting Agreement, and may be subject to limitations agreed upon by the contracting parties, including being qualified by confidential disclosures exchanged between the parties in connection with the execution of the Underwriting Agreement.

The legal opinion of The Matt Law Firm, PLLC relating to the Common Stock being offered is filed as Exhibit 5.1 to this Current Report on Form 8-K.

#### Item 7.01. Regulation FD Disclosure.

On September 28, 2016, the Company issued a press release announcing that it intended to make a public offering of shares of its common stock. On September 29, 2016, the Company issued a press release announcing the pricing and terms of the Offering. Copies of the two press releases are attached hereto as Exhibits 99.1 and 99.2, respectively, and are each incorporated herein by reference.

Pursuant to the rules and regulations of the Securities and Exchange Commission, the information in this Item 7.01 disclosure, including Exhibits 99.1 and 99.2 and information set forth therein, is deemed to have been furnished and shall not be deemed to be "filed" under the Securities Exchange Act of 1934.



## Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Pursuant to the rules and regulations of the Securities and Exchange Commission, the attached exhibits are deemed to have been filed with the Securities and Exchange Commission:

Exhibit Number	Description
1.1	Underwriting Agreement, dated as of September 29, 2016, by and between Actinium Pharmaceuticals, Inc. and H.C. Wainwright & Co. as representative of the several underwriters party thereto.
5.1	Opinion of The Matt Law Firm, PLLC.
23.1	Consent of The Matt Law Firm, PLLC (included in Exhibit 5.1).
99.1	Press Release issued by Actinium Pharmaceuticals, Inc. dated September 28, 2016.
99.2	Press Release issued by Actinium Pharmaceuticals, Inc. dated September 29, 2016.

3

## SIGNATURES

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

Dated: September 29, 2016

# ACTINIUM PHARMACEUTICALS, INC.

By: /s/ Sandesh Seth

Name: Sandesh Seth Title: Executive Chairman

4

## ACTINIUM PHARMACEUTICALS, INC.

8,000,000 Shares

Common Stock

(\$0.001 par value)

Underwriting Agreement

#### Underwriting Agreement

September 29, 2016

H.C. Wainwright & Co., LLC
As Representative of the several Underwriters named in <u>Schedule A</u> hereto
430 Park Avenue
New York, New York 10022

#### Ladies and Gentlemen:

Actinium Pharmaceuticals, Inc., a Delaware corporation (the "*Company*"), confirms its agreement pursuant to this Underwriting Agreement (this "*Agreement*") to the several underwriters listed on <u>Schedule A</u> attached hereto (collectively, the "*Underwriters*"), for whom H.C. Wainwright & Co., LLC is acting as representative (in such capacity, the "*Representative*"), with respect to the issue and sale by the Company of an aggregate total of 8,000,000 shares (the "*Firm Shares*") of the Company's common stock, \$0.001 par value (the "*Common Stock*"), the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of Firm Shares set forth in <u>Schedule A</u> hereto, and with respect to the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 1 hereof to purchase all or any part of 1,200,000 additional shares of Common Stock to cover over-allotments, if any (the "*Additional Shares*"). The Firm Shares and the Additional Shares are hereinafter called, collectively, the "*Shares*." The Shares are described in the Prospectus which is referred to below.

The Company has prepared and filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "*Act*"), with the Securities and Exchange Commission (the "*Commission*") a registration statement on Form S-3 (File No. 333-194768) under the Act (the "*registration statement*"), including a prospectus, which registration statement incorporates by reference documents which the Company has filed, or will file, in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "*Exchange Act*"). Such registration statement has become effective under the Act.

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

#### -1-

The Company has furnished to the Representative, for use by the Underwriters and by dealers in connection with the offering of the Shares, copies of one or more preliminary prospectus supplements and the documents incorporated by reference therein, relating to the Shares. Except where the context otherwise requires, "*Preliminary Prospectus*," as used herein, means each such preliminary prospectus supplement, in the form so furnished, including any basic prospectus (whether or not in preliminary form) furnished to the Underwriters by the Company and attached to or used with such preliminary prospectus supplement. Except where the context otherwise requires, "*Basic Prospectus*," as used herein, means the base prospectus included as part of the Registration Statement, in the form in which it has most recently been filed with the Commission prior to the date of this Agreement. Except where the context otherwise requires, "*Prospectus Supplement*," as used herein, means the final prospectus supplement, relating to the Shares, filed by the Company with the Commission pursuant to Rule 424(b) under the Act on or before the second business day after the date hereof (or such earlier time as may be required under the Act), in the form furnished by the Company to the Underwriters for use by the Underwriters and by dealers in connection with the offering of the Shares. Except where the context otherwise requires, "*Prospectus*," as used herein, means the form furnished by the Company to the Underwriters for use by the Underwriters and by dealers in connection with the offering of the Shares. Except where the context otherwise requires, erquired, under the Act), in the form furnished by the Company to the Underwriters for use by the Underwriters and by dealers in connection with the offering of the Shares. Except where the context otherwise requires, "*Prospectus*," as used herein, means the Basic Prospectus as supplemented by the Prospectus Supplement.

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

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

"Disclosure Package," as used herein, means the Preliminary Prospectus dated September 28, 2016, as supplemented by the Permitted Free Writing Prospectuses listed on <u>Schedule B</u> attached hereto, if any, and the information set forth on <u>Schedule C</u> attached hereto, taken as a whole.

"Applicable Time" as used herein means 7:00 a.m. (Eastern Time) on the date of this Agreement.

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



As used in this Agreement, "business day" shall mean a day on which NYSE MKT LLC ("NYSE MKT") is open for trading. The terms "herein," "hereof," "hereto," "hereinafter" and similar terms, as used in this Agreement, shall in each case refer to this Agreement as a whole and not to any particular section, paragraph, sentence or other subdivision of this Agreement. The term "or," as used herein, is not exclusive.

The Company and the Underwriters agree as follows:

1. <u>Sale and Purchase</u>. Upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Company agrees to sell to the respective Underwriters and each of the Underwriters, severally and not jointly, agrees to purchase from the Company the respective number of Firm Shares (subject to such adjustment as the Representative may determine to avoid fractional shares) set forth opposite the name of such Underwriter in <u>Schedule A</u> hereto, subject to adjustment in accordance herewith, in each case at a purchase price of \$1.175 per Share. The Company is advised by the Underwriters that the Underwriters intend (i) to make a public offering of their respective portions of the Firm Shares as soon after the effectiveness of this Agreement as in the Underwriters' judgment is advisable and (ii) initially to offer the Firm Shares upon the terms set forth in the Prospectus. The Underwriters may from time to time increase or decrease the public offering price after the initial public offering to such extent as the Underwriters may determine.

In addition, the Company hereby grants to the several Underwriters the option to purchase, and upon the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Underwriters shall have the right to purchase, severally and not jointly, from the Company, ratably in accordance with the number of Firm Shares to be purchased by each of them, all or a portion of the Additional Shares as may be necessary to cover over-allotments made in connection with the offering of the Firm Shares, at the same purchase price per share to be paid by the Underwriters to the Company for the Firm Shares. This option may be exercised by the Representative on behalf of the Underwriters at any time and from time to time on or before the thirtieth (30<sup>th</sup>) day following the date hereof, by written notice to the Company. Such notice shall set forth the aggregate number of Additional Shares as to which the option is being exercised, and the date and time when the Additional Shares are to be delivered (such date and time being herein referred to as the "*Additional Time of Purchase*"); provided, however, that the Additional Time of Purchase shall not be earlier than the Time of Purchase (as defined below) nor earlier than the second business day after the date on which the option shall have been exercised nor later than the tenth business day after the date on which the option shall have been exercised.

-3-

2. <u>Payment and Delivery</u>. Payment of the purchase price for the Firm Shares shall be made to the Company by Federal Funds wire transfer against delivery of the Firm Shares to the Representative on behalf of the Underwriters through the facilities of The Depository Trust Company ("*DTC*") for the respective accounts of the Underwriters. Such payment and delivery shall be made at 10:00 a.m., New York time, on October 4, 2016 (the "*Closing Date*") (unless another time shall be agreed to by the Representative and the Company). The time at which such payment and delivery are to be made is hereinafter sometimes called the "*Time of Purchase*." Electronic transfer of the Firm Shares shall be made to the Underwriters at the Time of Purchase in such names and in such denominations as the Representative shall specify.

Payment of the purchase price for the Additional Shares shall be made to the Company at the Additional Time of Purchase in the same manner as the payment for the Firm Shares. Electronic transfer of the Firm Shares shall be made to the Representative for the account of the Underwriters at the Time of Purchase in such names and in such denominations as the Representative shall specify. The Time of Purchase and the Additional Time of Purchase are sometimes referred to herein as the Closing Dates.

Deliveries of the documents described in Section 5 hereof with respect to the purchase of the Shares shall be made at the offices of Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, NY 10020, at 10:00 A.M., New York time, on the date of the closing of the purchase of the Firm Shares or the Additional Shares, as the case may be.

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

(a) the Registration Statement has heretofore become effective under the Act; no stop order of the Commission preventing or suspending the use of the Basic Prospectus, any Preliminary Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus, or the effectiveness of the Registration Statement, has been issued, and no proceedings for such purpose have been instituted or, to the Company's knowledge, are contemplated by the Commission;

-4-

the Registration Statement complied when it became effective, complies as of the date hereof and, as amended or (b)supplemented, at the Time of Purchase, each Additional Time of Purchase, if any, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, will comply, in all material respects, with the requirements of the Act; the conditions to the use of Form S-3 in connection with the offering and sale of the Shares as contemplated hereby have been satisfied; the Registration Statement meets, and the offering and sale of the Shares as contemplated hereby comply with, the requirements of Rule 415 under the Act; the Registration Statement did not, as of the Effective Time, as of the date hereof or as of the Time of Purchase or Additional Time of Purchase, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; each Preliminary Prospectus complied, at the time it was filed with the Commission, and complies as of the date hereof, in all material respects with the requirements of the Act; at no time during the period that begins on the earlier of the date of such Preliminary Prospectus and the date such Preliminary Prospectus was filed with the Commission and ends at the later of the Time of Purchase or the last Additional Time of Purchase, if any, did or will any Preliminary Prospectus, as then amended or supplemented, include an untrue statement of material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, and at no time during such period did or will any Preliminary Prospectus, as then amended or supplemented, together with any combination of one or more of the then issued Permitted Free Writing Prospectuses, if any, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; the Basic Prospectus complied as of its date and the date it was filed with the Commission, complies as of the date hereof and, as then amended or supplemented, at the Time of Purchase, each Additional Time of Purchase, if any, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, will comply, in all material respects, with the requirements of the Act; at no time during the period that begins on the earlier of the date of such Basic Prospectus and the date such Basic Prospectus was filed with the Commission and ends at the later of the Time of Purchase or the last Additional Time of Purchase, if any, did or will any Basic Prospectus, as then amended or supplemented, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, and at no time during such period did or will any Basic Prospectus, as then amended or supplemented, together with any combination of one or more of the then issued Permitted Free Writing Prospectuses, if any, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; the Basic Prospectus furnished to the Underwriters, as part of any Preliminary Prospectus and the Prospectus, is the same basic prospectus that is included as part of the Registration Statement, in the form of which has been most recently filed with the Commission, prior to the date of such Preliminary Prospectus and the Prospectus, respectively; the Disclosure Package as of the Applicable Time does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; each of the Prospectus Supplement and the Prospectus will comply, as of the date that it is filed with the Commission and, as then amended or supplemented, the date of the Prospectus Supplement, the Time of Purchase, each Additional Time of Purchase, if any, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares, in all material respects, with the requirements of the Act (in the case of the Prospectus, including, without limitation, Section 10(a) of the Act); at no time during the period that begins on the earlier of the date of the Prospectus Supplement and the date the Prospectus Supplement is filed with the Commission and ends at the later of the Time of Purchase, the last Additional Time of Purchase, if any, and the end of the period during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Shares did or will any Prospectus Supplement or the Prospectus, as then amended or supplemented, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; each Permitted Free Writing Prospectus does not conflict with the information contained in the Registration Statement, the Disclosure Package at the Applicable Time or the Prospectus, and at no time during the period that begins on the date of such Permitted Free Writing Prospectus and ends at the later of the Time of Purchase or the last Additional Time of Purchase, if any, did or will any Permitted Free Writing Prospectus include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representation or warranty in this Section 3(b) with respect to any statement contained in the Registration Statement, any Preliminary Prospectus, the Prospectus or any Permitted Free Writing Prospectus in reliance upon and in conformity with information concerning the Underwriters and furnished in writing by the Representative on behalf of such Underwriters to the Company expressly for use in the Registration Statement, such Preliminary Prospectus, the Prospectus or such Permitted Free Writing Prospectus; each Incorporated Document, 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 and did not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

-5-

prior to the execution of this Agreement, the Company has not, directly or indirectly, offered or sold any Shares by (c) means of any "prospectus" (within the meaning of the Act) or used any "prospectus" (within the meaning of the Act) in connection with the offer or sale of the Shares, in each case other than the Disclosure Package and any Permitted Free Writing Prospectus; the Company has not, directly or indirectly, prepared, used or referred to any Permitted Free Writing Prospectus except in compliance with Rules 164 and 433 under the Act; assuming such Permitted Free Writing Prospectus is so sent or given after the Registration Statement was filed with the Commission (and after such Permitted Free Writing Prospectus was, if required pursuant to Rule 433(d) under the Act, filed with the Commission), the sending or giving, by any Underwriter, of any Permitted Free Writing Prospectus will satisfy the provisions of Rule 164 and Rule 433 (without reliance on subsections (b), (c) and (d) of Rule 164); the Preliminary Prospectus dated September 28, 2016 is a prospectus that, other than by reason of Rule 433 or Rule 431 under the Act, satisfies the requirements of Section 10 of the Act, including a price range where required by rule; the conditions set forth in one or more of subclauses (i) through (iv), inclusive, of Rule 433(b)(1) under the Act are satisfied; neither the Company nor the Underwriters are disqualified, by reason of subsection (f) or (g) of Rule 164 under the Act, from using, in connection with the offer and sale of the Shares, "free writing prospectuses" (as defined in Rule 405 under the Act) pursuant to Rules 164 and 433 under the Act; the Company is not an "ineligible issuer" (as defined in Rule 405 under the Act) as of the eligibility determination date for purposes of Rules 164 and 433 under the Act with respect to the offering of the Shares contemplated by the Registration Statement;

(d) the financial statements of the Company, together with the related notes, set forth or incorporated by reference, in the Registration Statement, the Disclosure Package and the Prospectus comply in all material respects with the requirements of the Act and fairly present the financial condition of the Company and its Subsidiaries (defined below) as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with generally accepted accounting principles in the United States consistently applied throughout the periods involved: and the supporting schedules included in the Registration Statement. the Disclosure Package and the Prospectus have been derived from the accounting records of the Company and its Subsidiaries and present fairly the information required to be stated therein. No other schedules or other financial statements are required to be included in the Registration Statement, the Disclosure Package or the Prospectus. To the Company's knowledge, GBH CPAs, PC, which has expressed its opinion with respect to the financial statements filed as a part of the Registration Statement and included in the Registration Statement, the Disclosure Package and the Prospectus, is (x) an independent public accounting firm within the meaning of the Act, (y) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act")) and (z) in the performance of their work for the Company, not in violation of the auditor independence requirements of the Sarbanes-Oxley Act. Except as described in the Disclosure Package and the Prospectus, there are no material off-balance sheet transactions, arrangements, obligations (including contingent obligations), or any other relationships with unconsolidated entities or other persons, that may have a current or, to the knowledge of the Company, future material adverse effect on the Company's or its Subsidiaries' financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses;

-6-

the Company has been duly organized and is validly existing as a corporation in good standing under the laws of the (e) State of Delaware. The Company has full corporate power and authority to own its properties and conduct its business as currently being conducted and as described in the Registration Statement, the Disclosure Package and the Prospectus, and is duly qualified to do business as a foreign corporation in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify would reasonably be expected to result in a material adverse change in the business, prospects, management, properties, operations, condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole ("Material Adverse Change"). The Company has no subsidiaries (as defined under the Act) other than those listed on Exhibit 21.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015 (collectively, the "Subsidiaries"); except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company owns, directly or indirectly, all of the issued and outstanding membership interests or capital stock, as applicable, of each of the Subsidiaries; other than the membership interests and capital stock of its Subsidiaries, the Company does not own, directly or indirectly, any shares of stock or any other equity interests or long-term debt securities of any corporation, firm, partnership, joint venture, association or other entity; complete and correct copies of the charters and the bylaws or similar organizational documents of the Company and the Subsidiaries and all amendments thereto have been delivered to the Representative, and no changes therein will be made on or after the date hereof through and including the Time of Purchase and the last Additional Time of Purchase, if any; each Subsidiary has been duly formed or incorporated, as applicable, and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, with full corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the Disclosure Package and the Prospectus; each Subsidiary is qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the ownership or leasing of its properties or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing would not, individually or in the aggregate, result in a Material Adverse Change; all of the outstanding membership interests or shares of capital stock, as applicable, of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and non-assessable, have been issued in compliance with all applicable securities laws, were not issued in violation of any preemptive right, resale right, right of first refusal or similar right and are owned by the Company subject to no security interest, other encumbrance or adverse claims; and no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligation into membership interests or shares of capital stock or ownership interests in the Subsidiaries are outstanding;

-7-

(f) except as contemplated in the Disclosure Package and the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, (a) neither the Company nor any of its Subsidiaries has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and (b) there has not been (i) 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, warrants or equity compensation awards), (ii) any material change in the short term or long term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, of the Company or any of its Subsidiaries (other than issuances of options and equity compensation awards under the Company's existing equity incentive plans), or (iii) any Material Adverse Change or any development that would reasonably be expected to result in a Material Adverse Change;

(g) except as set forth in the Disclosure Package and the Prospectus, there is not pending or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding to which the Company or any of its Subsidiaries is a party or of which any property or assets owned or leased by the Company or any of its Subsidiaries, any employee benefit plan sponsored by the Company or, to the Company's knowledge, any officer or director of the Company is the subject before or by any court or governmental agency, authority or body, or any arbitrator, which, individually or in the aggregate, would reasonably be expected to result in any Material Adverse Change. There are no current or pending legal, governmental or regulatory actions, suits or proceedings that are required to be described in the Registration Statement, the Disclosure Package and the Prospectus that have not been so described;

(h) there are no statutes, regulations, contracts or documents that are required to be described in the Registration Statement, the Disclosure Package and the Prospectus or to be filed as exhibits to the Registration Statement by the Act that have not been so described or filed;

this Agreement has been duly authorized, executed and delivered by the Company, and constitutes a valid, legal and (i) binding obligation of the Company, enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity. The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not (A) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its Subsidiaries pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound or to which any of the property or assets of the Company or any of its Subsidiaries is subject, except as would not reasonably be expected to result in a Material Adverse Change, (B) result in any violation of the provisions of the charter or by-laws of the Company or any of its Subsidiaries or (C) result in the material violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority. No consent, approval, authorization or order of, or filing with, any court or governmental agency or body is required for the execution, delivery and performance of this Agreement or for the consummation of the transactions contemplated hereby, including the issuance and sale of the Shares by the Company, except such as may be required under the Act, the rules of the Financial Industry Regulatory Authority ("FINRA"), NYSE MKT or state securities or blue sky laws; and the Company has full corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby, including the authorization, issuance and sale of the Shares as contemplated by this Agreement;

-8-

all of the issued and outstanding shares of capital stock of the Company, including the Shares to be sold by the (i) Company and all other outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing; the Additional Shares which may be sold hereunder by the Company have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable; and the capital stock of the Company, including the Common Stock, conforms to the description thereof in the Registration Statement, the Disclosure Package and the Prospectus. Except as otherwise described in the Registration Statement, the Disclosure Package and the Prospectus, there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by laws or any agreement or other instrument to which the Company is a party or by which the Company is bound. Except as otherwise described in the Registration Statement, the Disclosure Package and the Prospectus, neither the filing of the Registration Statement nor the offering or sale of the Shares as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company. The Shares to be issued and sold by the Company, after they are delivered against payment therefor as provided herein, will be, free of preemptive rights, resale rights, rights of first refusal and similar rights and will be free of any restriction upon the voting or transfer thereof, in each case, pursuant to Delaware Law, the Company's charter or bylaws or any agreement or other instrument to which the Company is a party. Except as described or contemplated in the Registration Statement, the Disclosure Package and the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company any shares of the capital stock of the Company. The Company has an authorized and outstanding capitalization as set forth in the Registration Statement, the Disclosure Package and the Prospectus. The description of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Disclosure Package and the Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights;

(k) except as described in the Disclosure Package and the Prospectus, the Company and each Subsidiary possesses all material licenses, certificates, permits and other authorizations issued by, and has 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 business, except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change; except as described in the Disclosure Package and the Prospectus, neither the Company nor any Subsidiary has received notice of any revocation or modification of any such license, certificate, permit or authorization or has received any notice that any such license, certificate, permit or authorization will not be renewed in the ordinary course; and the Company and each Subsidiary is in compliance with all applicable federal, state, local and foreign laws, regulations, orders and decrees except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change;

-9-

(1) the Company and each of its Subsidiaries has good and marketable title to all property (whether real or personal) described in the Registration Statement, the Disclosure Package and the Prospectus as being owned by it, in each case free and clear of all liens, claims, security interests, other encumbrances or defects, except as described in the Registration Statement, the Disclosure Package and the Prospectus, and except those that would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change. The property held under lease by the Company or any of its Subsidiaries is held by it under valid, subsisting and enforceable leases with respect to the Company or its Subsidiaries, as applicable, with only such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company or such Subsidiary;

the Company and its Subsidiaries own, possess, license or can acquire or license on reasonable terms all Intellectual (m)Property necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or as described in the Registration Statement, the Disclosure Package and the Prospectus as being owned or licensed by them, except as such failure to own, possess, license or acquire such rights would not reasonably be expected to result in a Material Adverse Change. Except as set forth in the Registration Statement, the Disclosure Package and the Prospectus, (A) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property, except as such infringement, misappropriation or violation would not reasonably be expected to result in a Material Adverse Change: (B) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the Company's or any of its Subsidiaries' rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim, except for any claim as would not reasonably be expected to result in a Material Adverse Change; (C) the Intellectual Property owned by the Company and its Subsidiaries and, to the knowledge of the Company, the Intellectual Property licensed to the Company and its Subsidiaries have not been adjudged invalid or unenforceable, in whole or in part, in any respect that would be material to the Company, and there is no pending or threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim, except for any claim as would not reasonably be expected to result in a Material Adverse Change; (D) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company or any of its Subsidiaries infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, neither the Company nor any of its Subsidiaries has received any written notice of such claim, and the Company is unaware of any facts which would form a reasonable basis for any such claim, except for any claim as would not reasonably be expected to result in a Material Adverse Change; and (E) to the Company's knowledge, no employee of the Company or any of its Subsidiaries is in or has 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 the basis of such violation relates to such employee's employment with the Company or any of its Subsidiaries or actions undertaken by the employee while employed with the Company of any of its Subsidiaries, except for any violation as would not reasonably be expected to result in a Material Adverse Change. "Intellectual Property" shall mean all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, know-how and other intellectual property;

-10-

(n) neither the Company nor any of its Subsidiaries is (A) in violation of its charter or by laws; (B) in breach of or otherwise in default, and no event has occurred which, with notice or lapse of time or both, would constitute such a default in the performance or observance of any term, covenant, obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement, mortgage, deed of trust or any other contract, lease or other instrument to which it is subject or by which it may be bound, or to which any of the material property or assets of the Company or any of its Subsidiaries is subject; or (C) 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 (B) and (C) above, as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change;

(o) the Company and each of its Subsidiaries has timely filed all federal, state, local and foreign income and franchise tax returns required to be filed (or have timely requested and received applicable extension therefor) and is not in default in the payment of any material taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company or any of its Subsidiaries is contesting in good faith. There is no pending dispute with any taxing authority relating to any of such returns and the Company has no knowledge of any proposed liability for any tax to be imposed upon the properties or assets of the Company or any of its Subsidiaries for which there is not an adequate reserve reflected in the Company's financial statements included in the Registration Statement, the Disclosure Package and the Prospectus;

(p) the Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Shares other than the Disclosure Package or the Prospectus or other materials permitted by the Act to be distributed by the Company; *provided, however*, that, except as set forth on <u>Schedule B</u>, the Company has not made and will not make any offer relating to the Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the Act;

(q) the Common Stock of the Company is registered and listed on NYSE MKT under the ticker symbol "ATNM." The Company has not received any notice that it is not in compliance with the listing or maintenance requirements of NYSE MKT. The Company believes that it is, and has no reason to believe that it will not in the foreseeable future continue to be in material compliance with all such listing and maintenance requirements. To the Company's knowledge, except as described in the Registration Statement, the Disclosure Package or the Prospectus, there are no affiliations among the Company's directors and officers and members of FINRA. A Registration Statement relating to the Common Stock on Form 8-A or other applicable form under the Exchange Act has become effective;

-11-

(r) Except as disclosed in the Registration Statement, in the Disclosure Package and in the Prospectus, the Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles in the United States and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, in the Disclosure Package and in the Prospectus, the Company's internal control over financial reporting is effective; none of the Company, its board of directors and audit committee is aware of any "significant deficiencies" or "material weaknesses" (each as defined by the Public Company Accounting Oversight Board) in its internal control over financial reporting, or any fraud, whether or not material, that involves management or other employees of the Company who have a significant role in the Company's internal controls; and since the end of the latest audited fiscal year, there has been no change in the Company's internal control over financial reporting (whether or not remediated) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting;

(s) the Company's board of directors has validly appointed an audit committee whose composition satisfies the applicable requirements of Rule 803A(2) of the NYSE MKT Company Guide (the "*NYSE MKT Rules*") and the Company's board of directors and/or the audit committee has adopted a charter that satisfies the requirements of Rule 803B(1) of the NYSE MKT Rules. Neither the Company's board of directors nor the audit committee has been informed, nor is any director of the Company aware, of (A) any "significant deficiencies" or "material weaknesses" (other than as disclosed in the Registration Statement, the Disclosure Package and the Prospectus) in the design or operation of the Company's internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weakness in the Company's internal controls; or (B) any fraud, whether or not material, that involves management or other employees of the Company who have a significant role in the Company's internal control over financial reporting;

(t) no relationship, direct or indirect, exists between or among the Company and its Subsidiaries, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company and its Subsidiaries, on the other hand, which is required to be described in the Registration Statement, the Disclosure Package and the Prospectus which is not so described. Neither the Company nor any of its Subsidiaries has, directly or indirectly, extended or maintained credit, or arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any of its directors or executive officers in violation of applicable laws, including Section 402 of the Sarbanes-Oxley Act;

-12-

except as described in the Registration Statement, the Disclosure Package and the Prospectus, the Company and each (m)of its Subsidiaries: (A) is and at all times has been in compliance with all statutes, rules, regulations, or guidance applicable to Company or any of its Subsidiaries and the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company or any of its Subsidiaries ("Applicable Laws"), except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change; (B) has not received any FDA Form 483 notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration or any federal, state, local or foreign governmental authority having authority over the Company or any of its Subsidiaries ("Governmental Authority") alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and is not in violation of any term of any such Authorizations; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and has no knowledge that any such Governmental Authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and has no knowledge that any such Governmental Authority is considering such action; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission);

(v) the preclinical tests and clinical trials, and other studies (collectively, "studies") that are described in, or the results of which are referred to in, the Registration Statement, the Disclosure Package or the Prospectus were and, if still pending, are being conducted in all material respects in accordance with the protocols, procedures and controls designed and approved for such studies and with standard medical and scientific research procedures; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies, and the Company has no knowledge of any other studies the results of which are materially inconsistent with, or otherwise reasonably call into question in any material respect, the results described or referred to in the Registration Statement, the Disclosure Package or the Prospectus; the Company has made all such filings and obtained all such approvals and authorizations as may be required by the Food and Drug Administration of the U.S. Department of Health and Human Services or from any other U.S. or foreign government or drug or medical device regulatory agency (collectively, the "Regulatory Agencies"), or health care facility Institutional Review Board or Ethics Review Board (collectively, the "Review Boards"), except where the failure to make such filing or obtain such approval or authorization could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Change;

-13-

(w) except as disclosed in the Registration Statement, Disclosure Package or the Prospectus, neither the Company nor any of its Subsidiaries has received any written notices or statements from the Regulatory Agencies, the Review Boards or any other governmental agency, and otherwise has no knowledge or reason to believe, that (i) any new drug application or marketing authorization application for any product or potential product of the Company or any of its Subsidiaries is or has been rejected or determined to be non-approvable or conditionally approvable; (ii) a delay in time for review and/or approval of a marketing authorization application or marketing application in any other jurisdiction for any product or potential product of the Company or any of its Subsidiaries is or may be required, requested or being implemented; (iii) one or more clinical studies for any product or potential product of the Company or any of its Subsidiaries shall or may be requested or required in addition to the clinical studies described in the Registration Statement, the Disclosure Package or the Prospectus as a precondition to or condition of issuance or maintenance of a marketing approval for such product or potential product; (iv) any license, approval, permit or authorization to conduct any clinical trial of or market any product or potential product of the Company or any of its Subsidiaries has been, will be or may be suspended, revoked, modified or limited, except in the cases of clauses (i), (ii), (iii) and (iv) where such rejections, determinations, delays, requests, suspensions, revocations, modifications or limitations would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Change.

except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, to the Company's (x) knowledge, the preclinical and clinical testing, application for marketing approval of, manufacture, distribution, promotion and sale of the products and potential products of the Company or any of its Subsidiaries is in compliance, in all material respects, with all laws, rules and regulations applicable to such activities, including without limitation applicable good laboratory practices, good clinical practices and good manufacturing practices, except for such non-compliance as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change. The descriptions of the results of such tests and trials contained in the Registration Statement, the Disclosure Package and the Prospectus are accurate in all material respects. Except to the extent disclosed in the Registration Statement, the Disclosure Package and the Prospectus, neither the Company nor any of its Subsidiaries has received notice of adverse finding, warning letter or clinical hold notice from the FDA or any non-U.S. counterpart of any of the foregoing, or any untitled letter or other correspondence or notice from the FDA or any other governmental authority or agency or any institutional or ethical review board alleging or asserting noncompliance with any law, rule or regulation applicable in any jurisdiction, except notices, letters, and correspondences and non-U.S. counterparts thereof alleging or asserting such noncompliance as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, neither the Company nor any of its Subsidiaries has, either voluntarily or involuntarily, initiated, conducted or issued, or caused to be initiated, conducted or issued, any recall, field correction, market withdrawal or replacement, safety alert, warning, "dear doctor" letter, investigator notice, or other notice or action relating to an alleged or potential lack of safety or efficacy of any product or potential product of the Company or any of its Subsidiaries, any alleged product defect of any product or potential product of the Company or any of its Subsidiaries, or any violation of any material applicable law, rule, regulation or any clinical trial or marketing license, approval, permit or authorization for any product or potential product of the Company or any of its Subsidiaries, and the Company is not aware of any facts or information that would cause it to initiate any such notice or action and has no knowledge or reason to believe that the Regulatory Agencies, the Review Boards or any other governmental agency or authority or any institutional or ethical review board or other nongovernmental authority intends to impose, require, request or suggest such notice or action. The pre-clinical or clinical studies, tests, investigations, and trials conducted by or on behalf of the Company or any of its Subsidiaries are described in the Registration Statement, the Disclosure Package and the Prospectus were and, if still in progress, are being, conducted in compliance with all applicable U.S. and foreign statutes, rules, regulations, orders, or other laws, and, for any data to be submitted to the FDA pursuant to such studies, all applicable good laboratory practices and good clinical practices in all material respects. The descriptions of the pre-clinical or clinical studies, tests, investigations, and trials, including the related results and regulatory status thereof, contained in the Registration Statement, the Disclosure Package and the Prospectus are accurate in all material respects. Neither the Company nor any of its Subsidiaries has received and is otherwise not aware of any notices, correspondence or other communication from the FDA or other governmental regulatory agency or subdivision thereof, or any institutional or ethical review boards, asserting non-compliance with any applicable statutes, rules, regulations, orders, or other laws, or requiring or requesting the termination, suspension or modification of any preclinical or clinical studies, tests, investigations, or trials conducted by, or on behalf of, the Company or any of its Subsidiaries or in which the Company or any of its Subsidiaries has participated;

-14-

(y) the Company and each of its Subsidiaries (A) 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"*); (B) has received and is in compliance with all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business; and (C) 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 any such case for any such failure to comply, or any such failure to receive required permits, licenses or approvals, or any such liability as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change;

(z) the Company and each of its Subsidiaries (A) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all governmental authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace ("*Occupational Laws*"); (B) has received all material permits, licenses or other approvals required of it under applicable Occupational Laws to conduct its business as currently conducted; and (C) is in compliance, in all material respects, with all terms and conditions of such permit, license or approval. No action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company's knowledge, threatened against the Company or any of its Subsidiaries relating to Occupational Laws, and the Company does not have knowledge of any facts, circumstances or developments relating to its operations that would reasonably be expected to form the basis for or give rise to such actions, suits, investigations or proceedings;

-15-

(aa) each 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 Subsidiaries for employees or former employees of the Company and its Subsidiaries or to which the Company or its Subsidiaries has any direct or indirect liability, whether contingent or otherwise (each, a "*Company Plan*"), 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 with respect to any Company Plan excluding transactions effected pursuant to a statutory or administrative exemption; and for each Company 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;

(bb) except as set forth in the Registration Statement, the Disclosure Package and the Prospectus, neither the Company nor any of its Subsidiaries has granted rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products to any other person that are material to the Company nor is it bound by any agreement that affects the Company's or any Subsidiary's exclusive right to develop, manufacture, produce, assemble, distribute, license, market or sell its products that are material to the Company;

(cc) nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in the Registration Statement, the Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects and the Company has obtained the written consent to the use of such data from such sources to the extent required;

(dd) other than as contemplated by this Agreement, there is no broker, finder or other party that is entitled to receive from the Company or any of its Subsidiaries any broker's or finder's fee or agent's commission or other fee or commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby, except as previously waived;

(ee) the Company and each of its Subsidiaries carries, or is covered by, insurance issued by insurers of nationally recognized financial responsibility in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries; and neither the Company nor any of its Subsidiaries has (A) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (B) 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 at reasonable cost from similar insurers as may be necessary to continue its business. All such insurance is outstanding and duly in force on the date hereof;

(ff) neither the Company nor any of its Subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company or any of its Subsidiaries has (A) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (B) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (C) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977; or (D) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment;

-16-

(gg) neither the Company nor any of its Subsidiaries is and, after giving effect to the offering and sale of the Shares, will be an "investment company," as such term is defined in the Investment Company Act of 1940, as amended;

(hh) the conditions for use of Form S-3 set forth in the General Instructions thereto have been satisfied;

(ii) the Company and its Subsidiaries are in material compliance with all applicable provisions of the Sarbanes-Oxley Act and the rules and regulations of the Commission thereunder;

(jj) except as set forth in the Registration Statement, the Disclosure Package and the Prospectus, the Company and its Subsidiaries have established and maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) and such controls and procedures are effective in ensuring that material information relating to the Company and its Subsidiaries is made known to the principal executive officer and the principal financial officer. The Company and its Subsidiaries have utilized such controls and procedures in preparing and evaluating the disclosures in the Registration Statement, in the Disclosure Package and in the Prospectus;

(kk) the Company has obtained for the benefit of the Underwriters the agreement, in the form satisfactory to the Underwriters, of each of its directors and "officers" (within the meaning of Rule 16a-1(f) under the Exchange Act) (each, a "*Lock-Up Agreement*" and collectively, the "*Lock-Up Agreement*");

(ll) neither the Company nor any of its Subsidiaries is and, after giving effect to the offering and sale of the Shares, will be a "holding company" or a "subsidiary company" of a "holding company" or an "affiliate" of a "holding company" or of a "subsidiary company," as such terms are defined in the Public Utility Holding Company Act of 1935, as amended;

(mm) neither the Company nor any of its Subsidiaries are engaged in any unfair labor practice; except for matters which would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change, (i) there is (A) no unfair labor practice complaint pending or, to the Company's knowledge, threatened against the Company or any of its Subsidiaries before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or, to the Company's knowledge, threatened, (B) no strike, labor dispute, slowdown or stoppage pending or, to the Company's knowledge, threatened against the Company or any of its Subsidiaries and (C) no union representation dispute currently existing concerning the employees of the Company or any of its Subsidiaries, (ii) to the Company's knowledge, no union organizing activities are currently taking place concerning the employees of the Company or any of its Subsidiaries and (iii) there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees, any applicable wage or hour laws, any provision of the Worker Adjustment and Retraining Notification Act of 1988, as amended ("*WARN Act*"), or the WARN Act's state, foreign or local equivalent, or any provision of the Employee Retirement Income Security Act of 1974 or the rules and regulations promulgated thereunder concerning the employees of the Company or any of its Subsidiaries;

-17-

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

(oo) the operations of its Company and the Subsidiaries are and have been conducted at all times in material compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "*Money Laundering Laws*"); and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator or non-governmental authority involving the Company or any of its Subsidiaries with respect to the Money Laundering Laws is pending or, to the Company's knowledge, threatened;

(pp) neither the Company nor any of its Subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its Subsidiaries 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 of the Shares contemplated hereby, or lend, contribute or otherwise make available such proceeds to any of its Subsidiaries, joint venture partner or other person or entity, for the purpose of financing the activities of any person known by the Company currently subject to any U.S. sanctions administered by OFAC;

(qq) no Subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's property or assets to the Company or any other Subsidiary of the Company, except as described in the Registration Statement (excluding the exhibits thereto), the Disclosure Package and the Prospectus;

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(rr) the Company has not received any notice from NYSE MKT regarding the delisting of the Common Stock from NYSE

(ss) neither the Company nor any of its Subsidiaries nor any of their respective directors, officers or, to the knowledge of the Company, any of their affiliates or controlling persons has taken, directly or indirectly, any action designed, or which has constituted or might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares;

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

-18-

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

### 4. <u>Certain Covenants of the Company</u>. The Company hereby agrees:

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

(b) to make available to the Underwriters, as soon as practicable after this Agreement becomes effective, and thereafter from time to time to furnish to the Underwriters, as many copies of each Permitted Free Writing Prospectus, any Preliminary Prospectus and the Prospectus (or of the Prospectus as amended or supplemented if the Company shall have made any amendments or supplements thereto after the Effective Time) as the Representative may reasonably request for the purposes contemplated by the Act; to prepare the Prospectus in a form approved by the Underwriters and to file such Prospectus pursuant to Rule 424(b) under the Act not later than Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by the rules and regulations of the Commission under the Act; and in case any Underwriter is required to deliver (whether physically or through compliance with Rule 172 under the Act or any similar rule), in connection with the sale of the Shares, a prospectus after the nine-month period referred to in Section 10(a)(3) of the Act, or after the time a post-effective amendment to the Registration Statement is required pursuant to Item 512(a) of Regulation S-K under the Act, the Company will prepare, at its expense, promptly upon request such amendment or amendments to the Registration Statement and the Prospectus as may be necessary to permit compliance with the requirements of Section 10(a)(3) of the Act or Item 512(a) of Regulation S-K under the Act, as the case may be;

(c) to give the Representative notice of its intention to file or prepare any amendment to the Registration Statement (including any filing under Rule 462(b)) or any amendment, supplement or revision to the prospectus included in the Registration Statement at the time it became effective, any other preliminary prospectus, the Prospectus or any Permitted Free Writing Prospectus, whether pursuant to the Act or otherwise, and will furnish the Representative with copies of any such documents within a reasonable amount of time prior to such proposed filing or use, as the case may be, and will not file or use any such document to which the Representative or counsel for the Underwriters shall object;

-19-

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

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

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

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

-20-

(h) to make generally available to its security holders, and to deliver to the Underwriters, as soon as practicable but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement of the Company if necessary to satisfy the provisions of Section 11(a) of the Act covering a period of twelve months which will satisfy the provisions of Section 11(a) of the Act and Rule 158 under the Act;

(i) to furnish to the Underwriters two copies of the Registration Statement, as initially filed with the Commission, and of all amendments thereto (including all exhibits thereto and documents incorporated by reference therein);

to pay all costs, expenses, fees and taxes in connection with (i) the preparation and filing of the Registration Statement, the Basic Prospectus, each Preliminary Prospectus, the Prospectus Supplement, the Prospectus, each Permitted Free Writing Prospectus and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to the Underwriters and to dealers (including costs of mailing and shipment), (ii) the registration, issuance, sale and delivery of the Shares, including any stock or transfer taxes and stamp or similar duties payable upon the issuance, sale or delivery of the Shares to the Underwriters, (iii) the producing, word processing and/or printing of this Agreement, any dealer agreements, any powers of attorney, and any closing documents (including compilations thereof) and the reproduction and/or printing and furnishing of copies of each thereof to the Underwriters and (except closing documents) to dealers (including costs of mailing and shipment), (iv) the qualification of the Shares for offering and sale under state or foreign laws and the determination of their eligibility for investment under state or foreign laws (including the legal fees and filing fees and other disbursements of counsel for the Underwriters) and the printing and furnishing of copies of any blue sky surveys or legal investment surveys to the Underwriters and to dealers, (v) any listing of the Shares on any securities exchange or qualification of the Shares for quotation on NYSE MKT and any registration thereof under the Exchange Act, (vi) any filing for review of the public offering of the Shares by FINRA (including the legal fees and filing fees and other disbursements of counsel to the Underwriters relating to FINRA matters), (vii) the fees and disbursements of any transfer agent or registrar for the Shares, (viii) the costs and expenses of the Company relating to presentations or meetings undertaken in connection with the marketing of the offering and sale of the Shares to prospective investors and the Underwriters' sales forces, including, without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, and travel, lodging and other expenses incurred by the officers of the Company and any such consultants, (ix) the performance of the Company's other obligations hereunder, and (x) all other costs and expenses of the Underwriters incident to the performance of their obligations hereunder not otherwise specifically provided for herein and the fees and expenses of the Underwriters' legal counsel; provided, however, such costs and expenses provided for in this subsection (x) and subsections (iv) and (vi) above shall not exceed \$85,000 (including fees of counsel) (collectively, the "Fee Cap"); if this Agreement is terminated by the Representative pursuant to Section 6 hereof or if the sale of the Shares provided for herein is not consummated by reason of any failure, refusal or inability on the part of the Company to perform any agreement on its part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company will reimburse the non-defaulting Underwriters for all documented reasonable out-of-pocket disbursements (including but not limited to reasonable fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Shares or in contemplation of performing their obligations hereunder;

-21-

the Act;

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

(1) beginning on the date hereof and ending on, and including, the date that is 90 days after the date of the Prospectus Supplement (the "*Lock-Up Period*"), without the prior written consent of Representative (which consent may be withheld in its sole discretion), not to directly or indirectly, offer for sale, sell, contract to sell, pledge, grant any option for the sale of, or otherwise issue or dispose of, directly or indirectly (or publicly disclose the intention to make any such offer, sale, pledge, grant, issuance or other disposition), any Common Stock or any securities convertible into or exchangeable for, or any options or rights to purchase or acquire, Common Stock, except (A) to the Underwriters pursuant to this Agreement, (B) to directors, employees or consultants of the Company pursuant any employee stock incentive plan, stock ownership plan or dividend reinvestment plan of the Company in effect on the date hereof, (C) upon exercise, vesting or conversion of securities outstanding as of the date hereof and (D) sales of Common Stock pursuant to the At-the-Market Issuance Sales Agreement between the Company and FBR & Co., LLC (the "*ATM Agreement*") commencing on the 31<sup>st</sup> day following the earlier of (i) the closing of the sale of all of the Additional Shares and (ii) the end of the Over-Allotment Period. The Company agrees not to accelerate the vesting of any option or warrant or the lapse of any repurchase right prior to the expiration of the Lock-Up Period except for acceleration pursuant to change of control agreements in existence as of the date of this Agreement;

(m) prior to the Time of Purchase, to issue no press release or other communication directly or indirectly and hold no press conferences with respect to the Company or any of its Subsidiaries, the financial condition, results of operations, business, properties, assets, or liabilities of the Company or any of its Subsidiaries, or the offering of the Shares, without the prior consent of the Representative (which consent may be withheld in their sole discretion), except as required by law or the listing requirements of NYSE MKT;

(n) not, at any time at or after the execution of this Agreement, to, directly or indirectly, offer or sell any Shares by means of any "prospectus" (within the meaning of the Act), or use any "prospectus" (within the meaning of the Act) in connection with the offer or sale of the Shares, in each case other than the Prospectus;

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

-22-

(p) to use its best efforts to cause the Shares to be listed on NYSE MKT and to maintain the listing of the Common Stock for quotation on NYSE MKT;

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

(r) to use the net proceeds received by it from the issuance and sale of the Shares pursuant to this Agreement in the manner specified in the Disclosure Package and the Prospectus Supplement under the caption "Use of Proceeds"; and

(s) that, without the prior consent of the Representative (which consent may be withheld in its sole discretion), it has not made and will not make any offer relating to the Shares that would constitute a "free writing prospectus" (as defined in Rule 405 under the Act); the Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Permitted Free Writing Prospectus, including timely filing with the Commission or retention where required and legending; and the Company agrees that if at any time following issuance of any Permitted Free Writing Prospectus any event occurred or occurs as a result of which such Permitted Free Writing Prospectus would conflict with the information in the Registration Statement, the Disclosure Package or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading, the Company will give prompt notice thereof to the Underwriters and, if requested by the Representative, will prepare and furnish without charge to the Underwriters a Permitted Free Writing Prospectus or other document which will correct such conflict, statement or omission.

5 . <u>Conditions of the Underwriters' Obligations</u>. The several obligations of the Underwriters hereunder are subject to the accuracy of the representations and warranties on the part of the Company on the date hereof and at the Time of Purchase and each Additional Time of Purchase, if any, the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

(a) The Company shall furnish to the Underwriters at the Time of Purchase and each Additional Time of Purchase, if any, an opinion and negative assurance statement of The Matt Law Firm, PLLC, counsel for the Company, addressed to the Underwriters, and dated the Time of Purchase or the Additional Time of Purchase, as the case may be, in form and substance satisfactory to the Underwriters.

(b) The Company shall furnish to the Underwriters at the Time of Purchase and each Additional Time of Purchase, if any, an opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel for the Company, addressed to the Underwriters, and dated the Time of Purchase or the Additional Time of Purchase, as the case may be, in form and substance satisfactory to the Underwriters.

(c) The Underwriters shall have received from GBH CPAs, PC letters dated, respectively, the date of this Agreement and the Time of Purchase and each Additional Time of Purchase, if any, and addressed to the Underwriters in the forms satisfactory to the Underwriters, which letters shall cover the various financial disclosures contained in the Registration Statement, the Disclosure Package and the Prospectus.

-23-

(d) The Underwriters shall have received at the Time of Purchase and each Additional Time of Purchase, if any, the negative assurance statement of Lowenstein Sandler LLP, counsel for the Underwriters, dated the Time of Purchase or the Additional Time of Purchase, as the case may be, in form and substance reasonably satisfactory to the Underwriters.

(e) No Prospectus or amendment or supplement to the Registration Statement or the Prospectus shall have been filed to which the Representative shall have objected in writing.

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

(g) Prior to and at the Time of Purchase and each Additional Time of Purchase, if any, (i) no stop order with respect to the effectiveness of the Registration Statement shall have been issued under the Act or proceedings initiated under Section 8(d) or 8(e) of the Act; (ii) the Registration Statement and all amendments thereto shall 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 not misleading; (iii) none of the Preliminary Prospectuses or the Prospectus nor any amendment or supplement thereto, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; (iv) neither the Disclosure Package, nor any amendment or supplement thereto, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; and (v) none of the Permitted Free Writing Prospectuses, if any, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; and (v) none of the Permitted Free Writing Prospectuses, if any, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; and (v) none of the Permitted Free Writing Prospectuses, if any, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading.

(h) The Company will, at the Time of Purchase and each Additional Time of Purchase, if any, deliver to the Underwriters a certificate of its Chief Executive Officer and its Principal Financial Officer, dated the Time of Purchase, in a form satisfactory to the Representative.

(i) The Underwriters shall have received each of the signed Lock-Up Agreements referred to in Section 3(ll) hereof, and each such Lock-Up Agreement shall be in full force and effect at the Time of Purchase and each Additional Time of Purchase, if any.

(j) The Company shall have furnished to the Underwriters such other documents and certificates as to the accuracy and completeness of any statement in the Registration Statement, the Disclosure Package, the Prospectus or any Permitted Free Writing Prospectus as of the Time of Purchase and each Additional Time of Purchase, if any, as the Representative may reasonably request.

-24-

(k) The Shares shall have been approved for listing on NYSE MKT, subject only to notice of issuance at or prior to the Time of Purchase or the Additional Time of Purchase, as the case may be.

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

6. <u>Effective Date of Agreement; Termination</u>. This Agreement shall become effective when the parties hereto have executed and delivered this Agreement.

Prior to the purchase of the Firm Shares by the Underwriters on the Closing Date, the obligations of the several Underwriters hereunder shall be subject to termination in the absolute discretion of the Representative, if (1) since the time of execution of this Agreement or the earlier respective dates as of which information is given in the Registration Statement, the Disclosure Package or the Prospectus, there has been any change or any development involving a prospective change in the business, prospects, management, properties, operations, condition (financial or otherwise) or results of operations of the Company and its Subsidiaries, or such change in general market conditions, taken as a whole, the effect of which change or development is, in the judgment of the Representative, so material and adverse as to make it impractical or inadvisable to proceed with the public offering or the delivery of the Shares on the terms and in the manner contemplated in the Registration Statement, the Disclosure Package and the Prospectus, or (2) since the time of execution of this Agreement, there shall have occurred: (A) a suspension or material limitation in trading in securities generally on NYSE MKT, the New York Stock Exchange or The Nasdaq Stock Market; (B) a suspension or material limitation in trading in the Company's securities on NYSE MKT; (C) a general moratorium on commercial banking activities declared by either federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (D) an outbreak or escalation of hostilities or acts of terrorism involving the United States or a declaration by the United States of a national emergency or war; or (E) any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (D) or (E), in the judgment of the Representative, makes it impractical or inadvisable to proceed with the public offering or the delivery of the Shares on the terms and in the manner contemplated in the Registration Statement, the Disclosure Package and the Prospectus.

If the Representative elect to terminate this Agreement as provided in this Section 6, the Company and each other Underwriter shall be notified promptly in writing.

If the sale to the Underwriters of the Shares, as contemplated by this Agreement, is not carried out by the Underwriters for any reason permitted under this Agreement, or if such sale is not carried out because the Company shall be unable to comply with any of the terms of this Agreement, the Company shall not be under any obligation or liability under this Agreement (except to the extent provided in Sections 4(j) and 7 hereof), and the Underwriters shall be under no obligation or liability to the Company under this Agreement or to one another hereunder.

-25-

### 7. Indemnity and Contribution.

The Company agrees to indemnify, defend and hold harmless each Underwriter, its partners, directors and officers, any (a) person who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, any such Underwriter or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company) or arises out of or is based upon any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through the Representative to the Company expressly for use in, the Registration Statement or arises out of or is based upon any omission or alleged omission to state a material fact in the Registration Statement in connection with such information, which material fact was not contained in such information and which material fact was required to be stated in such Registration Statement or was necessary to make such information not misleading or (ii) any untrue statement or alleged untrue statement of a material fact included in any Prospectus (the term Prospectus for the purpose of this Section 7 being deemed to include the Basic Prospectus, each Preliminary Prospectus, the Prospectus Supplement, the Prospectus and any amendments or supplements to the foregoing), in any Covered Free Writing Prospectus, in any "issuer information" (as defined in Rule 433 under the Act) of the Company or in any Prospectus together with any combination of one or more of the Covered Free Writing Prospectuses, if any, or arises out of or is based upon any omission or alleged omission to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, except, with respect to such Prospectus or Permitted Free Writing Prospectus, insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by or on behalf of such Underwriter through the Representative to the Company expressly for use in, such Prospectus or Permitted Free Writing Prospectus or arises out of or is based upon any omission or alleged omission to state a material fact in such Prospectus or Permitted Free Writing Prospectus in connection with such information, which material fact was not contained in such information and which material fact was necessary in order to make the statements in such information, in the light of the circumstances under which they were made, not misleading.

-26-

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

If any action, suit or proceeding (each, a "Proceeding") is brought against a person (an "indemnified party") in respect (c) of which indemnity may be sought against the Company or an Underwriter (as applicable, the "indemnifying party") pursuant to subsection (a) or (b), respectively, of this Section 7, such indemnified party shall promptly notify such indemnifying party in writing of the institution of such Proceeding and such indemnifying party shall assume the defense of such Proceeding, including the employment of counsel reasonably satisfactory to such indemnified party and payment of all fees and expenses; provided, however, that the omission to so notify such indemnifying party shall not relieve such indemnifying party from any liability which such indemnifying party may have to any indemnified party or otherwise. The indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless the employment of such counsel shall have been authorized in writing by the indemnifying party in connection with the defense of such Proceeding or the indemnifying party shall not have, within a reasonable period of time in light of the circumstances, employed counsel to defend such Proceeding or such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from, additional to or in conflict with those available to such indemnifying party (in which case such indemnifying party shall not have the right to direct the defense of such Proceeding on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by such indemnifying party and paid as incurred (it being understood, however, that such indemnifying party shall not be liable for the expenses of more than one separate counsel (in addition to any local counsel) in any one Proceeding or series of related Proceedings in the same jurisdiction representing the indemnified parties who are parties to such Proceeding). The indemnifying party shall not be liable for any settlement of any Proceeding effected without its written consent, such consent not to be unreasonably withheld, but, if settled with its written consent, such indemnifying party agrees to indemnify and hold harmless the indemnified party or parties from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second sentence of this Section 7(c), then the indemnifying party agrees that it shall be liable for any settlement of any Proceeding effected without its written consent if (i) such settlement is entered into more than 60 business days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall not have fully reimbursed the indemnified party in accordance with such request prior to the date of such settlement and (iii) such indemnified party shall have given the indemnifying party at least 30 days' prior notice of its intention to settle. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened Proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such Proceeding and does not include an admission of fault or culpability or a failure to act by or on behalf of such indemnified party.

-27-

If the indemnification provided for in this Section 7 is unavailable to an indemnified party under subsections (a) and (b) (d) of this Section 7 or insufficient to hold an indemnified party harmless in respect of any losses, damages, expenses, liabilities or claims referred to therein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, damages, expenses, liabilities or claims (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions which resulted in such losses, damages, expenses, liabilities or claims, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand shall be deemed to be in the same respective proportions as the total proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriters, bear to the aggregate public offering price of the Shares. The relative fault of the Company on the one hand and of the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue statement or alleged untrue statement of a material fact or omission or alleged omission relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, damages, expenses, liabilities and claims referred to in this subsection shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with investigating, preparing to defend or defending any Proceeding.

-28-

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section (e) 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in subsection (d) above. Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by such Underwriter and distributed to the public were offered to the public exceeds the amount of any damage which such Underwriter has otherwise been required to pay by reason of such untrue statement or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 7 are several in proportion to their respective underwriting commitments and not joint. The indemnity and contribution agreements contained in this Section 7 and the covenants, representations and warranties of the Company contained in this Agreement shall remain in full force and effect regardless of any investigation made by or on behalf of any Underwriter, its partners, directors or officers or any person (including each partner, director or officer of such person) who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, or by or on behalf of the Company, its directors or officers or any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and shall survive any termination of this Agreement or the issuance and delivery of the Additional Shares to be sold by the Company pursuant hereto. The Company and each Underwriter agree promptly to notify each other of the commencement of any Proceeding against it and, in the case of the Company, against any of its officers or directors in connection with the issuance and sale of the Shares, or in connection with the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, the Prospectus or any Permitted Free Writing Prospectus.

8 . <u>Information Provided by the Underwriters</u>. The Company and the Underwriters acknowledge that, for purposes of this Agreement, the statements set forth in the section entitled "Price Stabilization and Short Positions" under the heading "Underwriting" in the Preliminary Prospectus dated September 28, 2016 and the Prospectus constitute the only information furnished in writing to the Company by any Underwriter through the Representative expressly for use in the Registration Statement, the Disclosure Package or the Prospectus.

9. <u>Notices</u>. In all dealings hereunder, the Representative shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by the Representative on behalf of the Underwriters. Except as otherwise herein provided, all statements, requests, notices and agreements shall be in writing or facsimile and, if to the Underwriters, shall be sufficient in all respects if delivered or sent to H.C. Wainwright & Co., LLC, 430 Park Avenue, New York, New York 10022, Attention: Edward Silvera with a copy (which shall not constitute notice) to Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, New York 10020, Attention: Steven M. Skolnick, Esq. (fax no.: 973-597-2477); and if to the Company, shall be sufficient in all respects if delivered or sent to the Company at the offices of the Company at 275 Madison Avenue, 7<sup>th</sup> Floor, New York, NY 10016, Attention: Sandesh Seth with copies (which shall not constitute notice) to The Matt Law Firm, PLLC, 1701 Genesee Street, Utica, NY 13501, Attention: Thomas Slusarczyk, Esq. (fax no.: 315-624-7359).

10. <u>Governing Law; Construction</u>. This Agreement and any claim, counterclaim or dispute of any kind or nature whatsoever arising out of or in any way relating to this Agreement ("*Claim*"), directly or indirectly, shall be governed by, and construed in accordance with, the laws of the State of New York. The section headings in this Agreement have been inserted as a matter of convenience of reference and are not a part of this Agreement.

-29-

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

12. <u>Parties at Interest</u>. The agreement herein set forth has been and is made solely for the benefit of the Underwriters and the Company and to the extent provided in Section 7 hereof the controlling persons, partners, directors and officers referred to in such Section 7, and their respective successors, assigns, heirs, personal Representative and executors and administrators. No other person, partnership, association or corporation (including a purchaser, as such purchaser, from any of the Underwriters) shall acquire or have any right under or by virtue of this Agreement.

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

14. <u>Counterparts</u>. This Agreement may be signed by the parties in one or more counterparts which together shall constitute one and the same agreement among the parties.

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

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

-30-

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

Very truly yours,

ACTINIUM PHARMACEUTICALS, INC.

By: /s/ Sandesh Seth

Name: Sandesh Seth Title: Executive Chairman H.C. Wainwright & Co., LLC Acting individually and as the Representative of the Underwriters named in the attached <u>Schedule A</u>

By: /s/ Edward Silvera Name: Edward Silvera Title: Head of Investment Banking

# Schedule A

## List of Underwriters

Name of Underwriters	Number of Firm Shares
H.C. Wainwright & Co., LLC	7,600,000
Jones Trading Institutional Services LLC	400,000
Total	8,000,000

Schedule B

Permitted Free Writing Prospectuses

None

## Schedule C

Firm Shares: 8,000,000 shares

Additional Shares: 1,200,000 shares

Public offering price per share: \$1.25 per share

Underwriting discounts per share: \$0.075 per share

Exhibit 5.1

MATT Attorneys at Law

The Matt Law Firm, PLLC 1701 Genesee Street Utica, New York 13501

> 315.624.7360 Fax: 315.624.7359

> > September 29, 2016

Actinium Pharmaceuticals, Inc. 275 Madison Avenue, 7th Floor New York, New York 10016

Ladies and Gentlemen:

You have requested our opinion, as special counsel to Actinium Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), with respect to certain matters in connection with the offering by the Company of up to 9,200,000 shares of its common stock, par value \$0.001 (the "**Shares**"), pursuant to the Registration Statement on Form S-3 (No. 333-194768) (the "**Registration Statement**") filed with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933 (the "**Act**"), the prospectus included within the Registration Statement dated April 18, 2014 (the "**Base Prospectus**"), and the prospectus supplement dated September 29, 2016, filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (the "**Prospectus Supplement**"). (The Base Prospectus and Prospectus Supplement are collectively referred to as the "**Prospectus**."). The Shares are to be sold by the Company as described in the Registration Statement and the Prospectus.

We have examined and relied upon the Registration Statement and the Prospectus, the Company's Certificate of Incorporation and By-laws, as currently in effect, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as we have deemed relevant in connection with this opinion. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, and the accuracy, completeness and authenticity of certificates of public officials.

We are licensed to practice in the State of New York. This opinion letter is limited to New York law, the Delaware General Corporation Law and applicable federal law of the United States. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares, when issued and sold in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement. In giving this consent, we do not admit that we are "experts" within the meaning of Section 11 of the Securities Act or within the category of persons whose consent is required by Section 7 of the Securities Act.

Very truly yours,

The Matt Law Firm, PLLC

/s/ The Matt Law Firm, PLLC



#### Actinium Announces Proposed Public Offering of Common Stock

**NEW YORK, NY – September 28, 2016** – Actinium Pharmaceuticals, Inc. (NYSE MKT: ATNM) ("Actinium" or "the Company"), a biopharmaceutical Company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers, announced today that it intends to offer shares of its common stock in an underwritten public offering. The offering is subject to market and other conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

H.C. Wainwright & Co. is acting as sole book-running manager for the offering.

The offering is being conducted pursuant to a shelf registration statement that was previously filed with, and declared effective by, the U.S. Securities and Exchange Commission ("SEC"). Prospective investors should read in their entirety the prospectus supplement and the accompanying prospectus and the other documents that Actinium has filed with the SEC for more complete information about Actinium and the offering. A preliminary prospectus supplement and accompanying prospectus relating to the offering will be filed with the SEC and will be available free of charge on the website of the SEC at <u>www.sec.gov</u>. When available, electronic copies of the preliminary prospectus supplement and the accompanying prospectus may also be obtained from the offices of H.C. Wainwright & Co., LLC by emailing placements@hcwco.com.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any of the securities described herein, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such state or jurisdiction.

#### **About Actinium Pharmaceuticals**

Actinium Pharmaceuticals, Inc. (<u>www.actiniumpharma.com</u>) is a New York-based biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium's targeted radioimmunotherapy products are based on its proprietary delivery platform for the therapeutic utilization of alpha-emitting Actinium-225 and Bismuth-213 and certain beta emitting radiopharmaceuticals in conjunction with monoclonal antibodies. The Company's lead radiopharmaceutical product candidate Iomab-B is designed to be used, upon approval, in preparing patients for hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. The Company is conducting a single, pivotal, multicenter Phase 3 clinical study of Iomab-B in refractory or relapsed AML patients over the age of 55 with a primary endpoint of durable complete remission. The Company's second product candidate, Actimab-A, is in a 53 patient, multicenter, open-label Phase 2 trial for patients newly diagnosed with AML over the age of 60 in a single-arm multicenter trial.

#### Forward-Looking Statements for Actinium Pharmaceuticals, Inc.

This news release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995, including statements regarding the proposed offering. These statements are based on management's current expectations and involve risks and uncertainties, which may cause actual results to differ materially from those set forth in the statements. The forward-looking statements may include statements regarding product development, product potential, or financial performance. No forward-looking statement can be guaranteed and actual results may differ materially from those projected. Actinium Pharmaceuticals undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

### **Contact:**

### Actinium Pharmaceuticals, Inc.

Steve O'Loughlin Vice President, Finance and Corporate Development soloughlin@actiniumpharma.com



# **Actinium Announces Pricing of Public Offering of Common Stock**

**NEW YORK, NY – September 29, 2016** – Actinium Pharmaceuticals, Inc. (NYSE MKT: ATNM) ("Actinium" or "the Company"), a biopharmaceutical Company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers, announced today the pricing of an underwritten public offering of 8,000,000 shares of its common stock at a price to the public of \$1.25. In addition, Actinium has granted the underwriters a 30-day option to purchase up to an additional 1,200,000 shares of common stock solely to cover over-allotments, if any. The offering is expected to close on or about October 4, 2016, subject to customary closing conditions.

The gross proceeds to Actinium from this offering is expected to be \$10,000,000, before deducting underwriting discounts and commissions and other estimated offering expenses payable by Actinium. Actinium currently intends to use the net proceeds from the sale of securities for general corporate purposes, including capital expenditures, the advancement of its drug candidates in clinical trials, such as Iomab<sup>TM</sup>-B and Actimab<sup>TM</sup>- A, preclinical trials, and to meet working capital needs

H.C. Wainwright & Co. is acting as sole book-running manager for the offering. JonesTrading Institutional Services LLC is acting as comanager for the offering. Roth Capital is acting as a financial advisor for the offering.

The offering is being conducted pursuant to a shelf registration statement that was previously filed with, and declared effective by, the U.S. Securities and Exchange Commission ("SEC"). Prospective investors should read in their entirety the prospectus supplement and the accompanying prospectus and the other documents that Actinium has filed with the SEC for more complete information about Actinium and the offering. A prospectus supplement and accompanying prospectus relating to the offering will be filed with the SEC and will be available free of charge on the website of the SEC at <u>www.sec.gov</u>. Electronic copies of the preliminary prospectus supplement and accompanying prospectus supplement and the accompanying prospectus may also be obtained from the offices of H.C. Wainwright & Co., LLC by emailing <u>placements@hcwco.com</u>.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any of the securities described herein, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such state or jurisdiction.

### **About Actinium Pharmaceuticals**

Actinium Pharmaceuticals, Inc. (<u>www.actiniumpharma.com</u>) is a New York-based biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium's targeted radioimmunotherapy products are based on its proprietary delivery platform for the therapeutic utilization of alpha-emitting Actinium-225 and Bismuth-213 and certain beta emitting radiopharmaceuticals in conjunction with monoclonal antibodies. The Company's lead radiopharmaceutical product candidate Iomab-B is designed to be used, upon approval, in preparing patients for hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. The Company is conducting a single, pivotal, multicenter Phase 3 clinical study of Iomab-B in refractory or relapsed AML patients over the age of 55 with a primary endpoint of durable complete remission. The Company's second product candidate, Actimab-A, is in a 53 patient, multicenter, open-label Phase 2 trial for patients newly diagnosed with AML over the age of 60 in a single-arm multicenter trial.

### Forward-Looking Statements for Actinium Pharmaceuticals, Inc.

This news release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995, including statements regarding the closing of the offering and the anticipated use of proceeds. These statements are based on management's current expectations and involve risks and uncertainties, which may cause actual results to differ materially from those set forth in the statements. The forward-looking statements may include statements regarding product development, product potential, or financial performance. No forward-looking statement can be guaranteed and actual results may differ materially from those projected. Actinium Pharmaceuticals undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

### Contact: Actinium Pharmaceuticals, Inc.

Steve O'Loughlin Vice President, Finance and Corporate Development soloughlin@actiniumpharma.com