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): December 28, 2012

CACTUS VENTURES, INC.

(Exact name of registrant as specified in its charter)

Nevada	**000-52446**	**000-52446**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

501 Fifth Avenue, 3rd Floor New York, NY	**10017**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(212) 300-2131**

123 W. Nye Lane, Suite 129 Carson City, NV 89706
(Former name or former address, if changed since last report)

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

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

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

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

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

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Current Report on Form 8-K (this "Report") contains forward-looking statements. The forward-looking statements are contained principally in the sections entitled "Description of Business," "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations." These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "anticipates," "believes," "seeks," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "would" and similar expressions intended to identify forward-looking statements. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. These risks and uncertainties include, but are not limited to, the factors described in the section captioned "Risk Factors" below. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Such statements may include, but are not limited to, information related to: anticipated operating results; relationships with our merchants and subscribers; consumer demand; financial resources and condition; changes in revenues; changes in profitability; changes in accounting treatment; cost of sales; selling, general and administrative expenses; interest expense; the ability to produce the liquidity or enter into agreements to acquire the capital necessary to continue our operations and take advantage of opportunities; legal proceedings and claims.

Also, forward-looking statements represent our estimates and assumptions only as of the date of this Report. You should read this Report and the documents that we reference and file or furnish as exhibits to this Report completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update any forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available in the future.

USE OF CERTAIN DEFINED TERMS

Except as otherwise indicated by the context, references in this report to "we," "us," "our," "our Company," or "the Company" are to the combined business of Cactus Ventures, Inc. and its consolidated subsidiaries.

In addition, unless the context otherwise requires and for the purposes of this Report only:

- "Closing Date" means December 28, 2012;
- "Exchange Act" refers to the Securities Exchange Act of 1934, as amended;
- "Actinium" or "API" refers to Actinium Pharmaceuticals, Inc., a Delaware corporation;
- "Cactus" or "CTVN" refers to Cactus Ventures, Inc., a Nevada corporation;
- "SEC" or refers to the Securities and Exchange Commission;
- "Securities Act" refers to the Securities Act of 1933, as amended and;

INTRODUCTION

On December 28, 2012, Cactus entered into a transaction (the "Share Exchange"), pursuant to which Cactus acquired 21% of the issued and outstanding equity securities of Actinium, in exchange for the issuance of 4,309,015 shares of common stock, par value $0.01 per share, of Cactus (the "Common Stock"), which were issued to the shareholders of Actinium. As a result of the Share Exchange, the former shareholders of Actinium became the controlling shareholders of Cactus. In connection with the Share Exchange, Diane S. Button, the former sole director and officer of Cactus submitted a resignation letter resigning from these positions, effective upon the closing of the Share Exchange, and the directors of Actinium were appointed to the Board of Directors of Cactus, and the officers of Actinium were appointed as the officers of Cactus. The Company intends to continue to exchange its shares of common stock for shares of Actinium held by the remaining Actinium shareholders.

The Share Exchange was accounted for as a reverse takeover/recapitalization effected by a share exchange, wherein Actinium is considered the acquirer for accounting and financial reporting purposes. For more information about the acquisition of Actinium, see "Item 1.01—Share Exchange" and "Item 2.01—Description of Business—Our Corporate History and Background" of this Report.

As a result of the Share Exchange, Cactus is now a holding company operating through Actinium, a clinical-stage biopharmaceutical company developing certain cancer treatments.

To the extent that we are deemed to be a shell company, and in accordance with the requirements of Item 2.01(a)(f) of Form 8-K, this Report sets forth information that would be required if the Cactus was required to file a general form for registration of securities on Form 10 under the Exchange Act with respect to the Common Stock (which is the only class of Cactus's securities subject to the reporting requirements of Section 13 or Section 15(d) of the Exchange Act upon consummation of the Share Exchange).

This Current Report contains summaries of the material terms of various agreements executed in connection with the transactions described herein. The summaries of these agreements are subject to, and are qualified in their entirety by, reference to these agreements, all of which are incorporated herein by reference.

This Current Report is being filed in connection with a series of transactions consummated by the Company and certain related events and actions taken by the Company.

This Current Report responds to the following items on Form 8-K:

Item 1.01 Entry into a Material Definitive Agreement

Item 2.01 Completion of Acquisition or Disposition of Assets

Item 3.02 Unregistered Sales of Equity Securities

Item 4.01 Changes in Registrant's Certifying Accountant

Item 5.01 Changes in Control of Registrant

Item 5.02 Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers; Compensatory Arrangements of Certain Officers

Item 5.05 Amendments to the Registrant's Code of Ethics, Waiver of the Code of Ethics

Item 5.06 Change in Shell Company Status

Item 9.01 Financial Statements and Exhibits

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Item 1.01 Entry into a Material Definitive Agreement.

ACQUISITION OF ACTINIUM AND RELATED TRANSACTIONS

Acquisition of Actinium

On the Closing Date, Cactus entered into a Share Exchange Agreement (the "Exchange Agreement") with (i) Actinium and (ii) the former shareholders of Actinium (the "Actinium Shareholders") pursuant to which we acquired 12,939,986 shares of capital stock of Actinium from the Actinium Shareholders in exchange for the issuance of 4,309,015shares of Common Stock to the Actinium Shareholders (the "Share Exchange"). As part of the Share Exchange, Actinium paid $250,000 to the shareholders of Cactus before the consummation of the Share Exchange. As a result of the Share Exchange, the Actinium Shareholders, became the principal shareholders of Cactus.

The foregoing description of the Exchange Agreement is qualified in its entirety by reference to the provisions of the Exchange Agreement filed as Exhibit 2.1 to this Report, which is incorporated by reference herein.

The Offering

On October 1, 2012, prior to the closing of the Share Exchange Agreement, Actinium commenced an offering (the "Offering") of units (the "Units") each Unit consisting of an aggregate of (i) 181,818 shares of common stock of Actinium (the "Actinium Stock"); (ii) an "A" warrant to purchase 181,818 shares of Actinium Stock, exercisable at a price of $0.55 per share for a period of one hundred and twenty (120) days from the date of the final closing of the Offering (the "A Warrant"); and (iii) a "B" warrant to purchase 90,909 shares of Actinium Stock, exercisable at a price of $0.825 per share for a period of five (5) years from the date of the final closing (the "B Warrant") (collectively, with the A Warrant, the "Investor Warrants"). The Units were offered to Accredited Investors (as such term is defined in Rule 501 under the Securities Act) for $100,000 each. Laidlaw & Company (UK) Ltd. was engaged by Actinium as its exclusive agent (the "Placement Agent") to assist in placing the Units. The minimum offering amount is $5,000,000 (the "Minimum Offering Amount") and the maximum offering amount is $15,000,000 (the "Maximum Offering Amount"). Actinium also granted the Placement Agent an option (the "Greenshoe Option") to increase the Offering through the sale, in whole or in part, of an amount of Units equal to $5,000,000.

On December 19, 2012 and in contemplation of the closing of the Share Exchange, Actinium closed on the Minimum Offering Amount selling an aggregate of 9,366,273 Units (prior to the Share Exchange) to investors (the "Investors"), pursuant to subscription agreement (the "Subscription Agreements") and Unit Purchase Agreements (the "Unit Purchase Agreements") for gross proceeds in the amount of $5,151,450, and net proceeds in the amount of $4,469,776 after legal and other fees and expenses remitted to the Placement Agent. Post the closing of the Share Exchange, the Offering will continue on the same terms on a pro-forma basis with the common shares offered at $1.65 per share, the 120 day warrants exercise price at $1.65 per share and the 5 year warrants exercise price at $2.48 per share.

Registration Rights

In connection with the Offering, Actinium entered into a 2012 investor rights agreement (the "Investor Rights Agreement") with each of the Investors, under which it would be required, within 45 days after the final closing of the Offering (the "Filing Deadline"), to file a registration statement (the "Registration Statement") registering for resale (i) all Common Stock issued to the Investors pursuant to the Share Exchange Agreement, in exchange for the Actinium Stock issued as part of the Units, and (ii) all shares of Common Stock issuable upon exercise of the warrants issued pursuant to the Share Exchange Agreement in exchange for the Investor Warrants (collectively, the "Registrable Shares"). The holders of any Registrable Shares removed from the Registration Statement as a result of a Rule 415 or other comment from the SEC shall have "piggyback" registration rights for such Registrable Shares with respect to any registration statement filed by Cactus following the effectiveness of the Registration Statement which would permit the inclusion of such Registrable Shares. Actinium has agreed to use its reasonable best efforts to have the Registration Statement declared effective within 30 days of being notified by the SEC that the Registration Statement will not be reviewed by the SEC (and in such case of no SEC review, not later than 60 days after the Filing Deadline) or within 180 days after the Filing Deadline in the event the SEC provides comments to the Registration Statement (the "Effectiveness Deadline"). In addition, certain other holders of the Company's common stock have demand registration rights at any time after the earlier of (i) October 2014, or (ii) three (3) months after API's common stock becomes publicly traded.

Lock-Up Agreement

On the Closing Date and in connection with the Offering, we entered into lock-up agreements (collectively, the "Lock-Up Agreements") with each of the officers, and directors, as well as the Placement Agent and any other controlling persons, under which they agreed to not sell or otherwise transfer any securities of Actinium or Cactus owned by them until the date that is the earlier of (i) twelve (12) months from the Closing Date; or (ii) six (6) months following the effective date of the Registration Statement. As of the date of this filing we have no signed a lock-up agreement with MSKCC, a 5% or more in care of Actinium's issued and outstanding Common Stock. The Company expects MSKCC to sign a lock-up agreement, which will be filed by amendment to this Form 8-K.

In addition, on the Closing Date and in connection with the Share Exchange, we also entered into a lock-up agreement with our former principal shareholder, Diane Button, under which she agreed to not sell or otherwise transfer any securities of Cactus owned by her until the date that is the earlier of (i) the final closing of the Offering, or (ii) February 28, 2013.

The foregoing description of the Subscription Agreements, Unit Purchase Agreement, A Warrant, B Warrant, Investor Rights Agreement, and Lock-Up Agreements are qualified in its entirety by reference to the provisions of the Forms of Subscription Agreement, Unit Purchase Agreement, A Warrant, B Warrant, Investor Rights Agreement and Lock-Up Agreement filed as Exhibits 10.6, 10.7, 4.1, 4.2, 10.20 and 4.3, respectively, to this Report, which are incorporated by reference herein.

Item 2.01 Completion of Acquisition or Disposition of Assets.

The disclosure in Item 1.01 of this Report regarding the Share Exchange is incorporated herein by reference in its entirety.

FORM 10 DISCLOSURE

As disclosed elsewhere in this Report, we acquired Actinium on the Closing Date pursuant to the Share Exchange, which was accounted for as a recapitalization effected by a share exchange. Item 2.01(f) of Form 8-K provides that if the Company was a shell company, other than a business combination related shell company (as those terms are defined in Rule 12b-2 under the Exchange Act) immediately before the Share Exchange, then the Company must disclose the information that would be required if the Company were filing a general form for registration of securities on Form 10 under the Exchange Act reflecting all classes of the Company's securities subject to the reporting requirements of Section 13 of the Exchange Act upon consummation of the Share Exchange.

To the extent that the Company might have been considered to be a shell company immediately before the Share Exchange, we are providing below the information that we would be required to disclose on Form 10 under the Exchange Act if we were to file such form. Please note that the information provided below relates to the combined Company after the acquisition of Actinium, except that information relating to periods prior to the date of the Share Exchange relate only to Actinium unless otherwise specifically indicated.

DESCRIPTION OF BUSINESS

Business Overview

We are a biopharmaceutical company focused on the $50 billion market for cancer drugs. Our most advanced products are Actimab ™-A, an antibody-drug construct containing actinium 225 (Ac-225), currently in human clinical trials for acute myeloid leukemia (AML) and Iomab™-B, an antibody-drug construct containing iodine 131 (I-131), used in myeloconditioning for hematopoietic stem cells transplantation (HSCT) in various indications. API is currently designing a trial which the Company intends to submit for registration approval in HSCT in the settings of refractory and relapsed acute myeloid leukemia in older patients. The Company is developing its cancer drugs using its expertise in radioimmunotherapy. In addition, the Ac-225 based drugs development relies on the patented Alpha Particle Immunotherapy Technology (APIT) platform technology co-developed with Memorial Sloan- Kettering Cancer Center, and a related institution. The APIT technology couples monoclonal antibodies (mAb) with extremely potent but comparatively safe alpha particle emitting radioactive isotopes, in particular actinium 225 and bismuth 213. The final drug construct is designed to specifically target and kill cancer cells while minimizing side effects. The Company intends to develop a number of products for different types of cancer and derive revenue from partnering relationships with large pharmaceutical companies and/or direct sales of its products in specialty markets in the U.S.

Our Corporate History and Background

We were formed as a Nevada corporation on October 6, 1997, originally under the name Zurich U.S.A., Inc. On July 10, 2006, we changed our name to Cactus Ventures, Inc. and began pursuing our business of marketing sunglasses. The Company encountered numerous problems with various vendors and ceased its operations. The Company shifted its efforts to seeking a business combination opportunity with a business entity, and negotiated a merger of a target company into the Company. Upon ceasing its operations, the Company was considered a "blank check" company as such term is defined under the Securities Act.

Upon completing the Share Exchange, the Company ceased being considered a “blank check” company and is now a clinical-stage biopharmaceutical company developing certain cancer treatments.

Acquisition of Actinium

On the Closing Date, Actinium completed a Share Exchange with Cactus, whereby Cactus acquired 21% of the issued and outstanding capital stock of Actinium from the Actinium Shareholders in exchange for the issuance of 4,309,015 shares of Common Stock to the Actinium Shareholders (the “Share Exchange”). Cactus has a class of securities registered under the Exchange Act of 1934 but its Common Stock is not registered under the Securities Act of 1933. As part of the Share Exchange, Actinium paid $250,000 to the shareholders of Cactus before the consummation of the Share Exchange. As a result of the Share Exchange, Actinium became the wholly owned subsidiary of Cactus and the Actinium Shareholders became the principal shareholders of Cactus.

The Share Exchange was treated as a recapitalization effected through a share exchange, with Actinium as the accounting acquirer and the Cactus the accounting acquiree. Unless the context suggests otherwise, when we refer in this Report to business and financial information for periods prior to the consummation of the Share Exchange, we are referring to the business and financial information of Actinium.

Effective following the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act, Diane S. Button has resigned from her position as member of the Board of Directors of the Company. Effective upon the closing of the Share Exchange, Diane S. Button resigned as an officer of the Company. Also effective upon the closing of the Share Exchange, Jack V. Talley was appointed to our Board of Directors. Effective as of the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act Dr. Rosemary Mazanet, David Nicholson, Sandesh Seth and Sergio Traversa were appointed to our Board of Directors. In addition, our Board of Directors appointed Jack V. Talley to serve as our President and Chief Executive Officer, Dragan Cicic to serve as our Chief Operating Officer and Chief Medical Officer, and Enza Guagenti to serve as our Chief Financial Officer, effective immediately upon the closing of the Share Exchange.

As a result of the Share Exchange, Actinium became a subsidiary of Cactus and Cactus assumed the business and operations of Actinium. Cactus plans to change its name to more accurately reflect its new business operations. As Cactus is a “reporting company” under the Exchange Act of 1934, and it is required to file periodic filings with the SEC, which include Actinium’s quarterly and annual financial statements.

Corporate History of Actinium

Actinium was incorporated in 2000 in the state of Delaware. Until the Share Exchange, Actinium was a clinical-stage, privately held biopharmaceutical company with:

- Two clinical-stage products, Iomab.-B and Actimab.-A, in development for blood borne cancers;
- Preclinical data in additional cancer indications;
- A proprietary technology platform for novel radioimmunotherapy cancer treatments; and
- A proprietary process for manufacturing of the alpha particle emitting radioactive isotope actinium 225 (Ac-225).

Iomab.-B has completed Phase I and Phase II trials as a preparatory regimen in conjunction with fludarabine and reduced intensity radiation conditioning in patients who are otherwise ineligible for hematopoietic stem cell transplantation (HSCT) and the Company expects it to enter a regulatory approval trial in 2013, subject to input from the FDA concerning the design and conduct of a pivotal trial. Actimab.-A is currently in a Phase I/II trial in newly diagnosed elderly acute myeloid leukemia (AML). In addition, using its patented Alpha Particle Immunotherapy Technology (APIT) platform and via its collaboration with the Memorial Sloan Kettering Cancer Center (MSKCC), the Company has preclinical data on potential drug candidates in several other cancer indications and expects to further develop these into clinical stage drug candidates.

The Actinium has one wholly owned subsidiary, MedActinium, Inc., a Delaware corporation, which is party to certain isotope related licenses and contracts on which the Company relies.

Upon Actinium's formation in 2000, it acquired Pharmactinium, Inc. and MedActinium, Inc., and through Pharmactinium, Inc. acquired certain rights to the APIT platform. Core technology patents were in-licensed from N.V. Organon which also provided seed funding. Pharmactinium, Inc. was party to a research and development agreement with MSKCC beginning in 1996. In 2002, this agreement and relationship was significantly expanded to the current relationship with API and now includes research and development, preclinical development, clinical trials and commercial technology licenses. In 2007, Pharmactinium, Inc. was merged with and into the Company. In 2007, the Company also acquired its sister company, Actinium Pharmaceuticals, Limited (Bermuda) (the "Bermuda Company"), by a merger of the Bermuda Company into API and thereby also acquired certain patent licenses relating to APIT previously licensed by the Bermuda Company to API.

In 2000, API also began what has become a long term relationship with General Atlantic Investments Limited (GAIL), an entity which has provided most of the Company's investment capital since 2000. In 2009, the parent of GAIL contributed and transferred its ownership of GAIL (now renamed Actinium Holdings, Limited), whose only asset at that time was the shares of API, to an indirect subsidiary of Memorial Sloan Kettering Cancer Center. In January 2012, the Company closed on $7,844,268 in gross funding through the sale of Series E Preferred Stock and a Senior Convertible Note financing. Our executive office is located at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 and our telephone number is (212) 300-2131. Our website address is http://www.actiniumpharmaceuticals.com. Except as set forth below, the information on our website is not part of the Form 10 information for Actinium.

Summary of Scientific and Business Achievements:

The Company's scientific and business achievements to date include:

- In-licensing a Phase II clinical stage monoclonal antibody, BC8, with safety and efficacy data in more than 250 patients in need of Hematotoietic (HSCT, currently in 7 active Phase I and Phase II clinical trials;
- Commencing a Company sponsored multi-center Phase I/II clinical trial for Actimab-A in elderly Acute Myeloid Leukemia;
- Developing and organizing manufacturing of Actinium's lead drug candidate which was accepted by the FDA for multi-center human use;
- Supporting three physician sponsored clinical trials, including a Phase I and a Phase I/II trial with the alpha emitting radioactive isotope bismuth 213 (Bi-213) based AML drug and a Phase I clinical trial with the alpha emitting radioactive isotope actinium 225 (Ac-225) based AML drug;
- In-licensing the AML targeting monoclonal antibody known as HuM195 or Lintuzumab;
- Establishing clinical and preclinical development relationships with world-class institutions such as MSKCC, Fred Hutchinson Cancer Research Center (FHCRC) and University of Texas MD Anderson Cancer Center (the MD Anderson Cancer Center relationship includes clinical trail only), as well as leading clinical experts in the fields of AML and HSCT;
- Securing rights to an intellectual property estate that covers key aspects of the Company's proprietary technology platform;
- Supporting a number of pipeline projects, including preclinical experiments in metastatic prostate cancer, metastatic colon cancer, antiangiogenesis and breast cancer models;
- Maintaining contractual relationship with Oak Ridge National Laboratory (ORNL) of the Department of Energy (DOE) which gives API access to most of the current world supply of Ac-225; and
- Successfully developing commercial production methods for actinium 225.

Business Strategy

API intends to potentially develop its most advanced clinical stage drug candidates through approval in the case of Iomab™-B and up to and including a Phase II proof of concept human clinical trial (a trial designed to provide data on the drug's efficacy) in the case of Actimab™-A. If these efforts are successful, API may elect to commercialize Iomab ™-B on its own or with a partner in the U.S. and/or outside of the U.S. to out-license the rights to develop and commercialize the product to a strategic partner. In the case of Actimab™-A, API will most likely seek to enter into strategic partnerships whereby the strategic partner(s) co-fund(s) further human clinical trials of the drug that are needed to obtain regulatory approvals for commercial sale within and outside of the U.S. In parallel, the Company intends to identify and begin initial human trials with additional actinium-225 drug candidates in other cancer indications. API intends to retain marketing rights for its products in the U.S. whenever possible and outlicense marketing rights to its partners for the rest of the world.

Market Opportunity

API is competing in the marketplace for cancer treatments estimated at over $54 billion in 2011 sales per IMS Health and projected to exceed $76 billion per year by 2015, according to the Global Academy for Medical Education. While surgery, radiation and chemotherapy remain staple treatments for cancer, their use is limited by the fact that they often cause substantial damage to normal cells. On the other hand, targeted therapies exert most or all of their effect directly on cancer cells, but often lack sufficient killing power to eradicate all cancer cells with just the antibody. A new approach for treating cancer is to combine the precision of antibody-based targeting agents with the killing power of radiation or chemotherapy by attaching powerful killing agents to precise molecular carriers called monoclonal antibodies (mAb). API uses monoclonal antibodies labeled with radioisotopes to deliver potent doses of radiation directly to cancer cells while sparing healthy tissues. The radioisotopes we use are the alpha emitter Ac-225 and the beta emitter I-131. I-131 is among the best known and well characterized radioisotopes. It is used very successfully in treatment of papillary and follicular thyroid cancer as well as other thyroid conditions. It is also attached to a monoclonal antibody in treatment of Non-Hodgkin's Lymphoma (NHL). It is also used experimentally with different carriers in other cancers. Ac-225 has many unique properties and the Company is a leader in developing this alpha emitter for clinical applications using its proprietary APIT technology.

API's most advanced products are Actimab™-A, Ac-225 labeled mAb for treatment of newly diagnosed AML, a cancer of the blood, in patients ineligible for currently approved therapies, and Iomab™-B, I-131 labeled mAb for preparation of relapsed and refractory AML patients for hematopoietic stem cell transplantation (HSCT). Iomab™-B offers the only potentially curative treatment for these patients most of whom do not survive beyond a year after being diagnosed with this condition. Iomab™-B has also demonstrated efficacy in HSCT preparation for other blood cancer indications, including Myelodysplastic Syndrome (MDS), acute lymphoblastic leukemia (ALL), Hodgkin's Lymphoma, and Non-Hodgkin's Lymphoma (NHL). These are all follow-on indications for which Iomab™-B can be developed and it is the Companies intention to explore these opportunities. In 2013, the Company intends to begin preclinical development of the mAb used in Iomab™-B by replacing I-131 with Ac-225. Such a follow-on product could have several advantages as a second generation product, including ease of transportation, minimal safety requirements for the centers using it, doses lower by orders of magnitude and significantly lower costs of manufacturing.

There are currently no approved treatments for either Actimab™-A or Iomab™-B targeted patients.

Other potential product opportunities in which a significant amount of preclinical work is being undertaken include metastatic colorectal cancer, metastatic prostate cancer and antiangiogenesis which reduces the blood supply to solid tumors.

The Company believes that its biggest market opportunity lies in the applicability of the Company's APIT platform technology to a wide variety of cancers. A broad range of solid and blood borne cancers can be potentially targeted by monoclonal (mAbs) to enable treatment with its APIT technology. The APIT technology could potentially be applied to mAbs that are already FDA approved to create more efficacious and/or safer drugs ("biobetters").

Clinical Trials

API has completed a Phase I and Phase I/II physician trial in AML at MSKCC using Bismab®-A, API's first generation AML drug that consists of bismuth-213 attached to the antibody Lintuzumab™. The Phase II arm of the Bismab®-A drug study has shown signs of the drug's efficacy and safety, including reduction in peripheral blast counts and complete responses in some patients. Bi-213 is a daughter, i.e., product of the degradation of Ac-225, with cancer cell killing properties similar to Ac-225 but is less potent.

API has commenced its first company sponsored Phase I/II multi-center trial with fractionated (two) doses of Actimab™-A, Actinium's lead product for treatment of elderly AML that consists of an AML specific monoclonal antibody (HuM195, also known as Lintuzumab™) and the actinium 225 radioactive isotope attached to it. The Company intends to conduct these trials at world-class cancer institutions such as MSKCC, Johns Hopkins Medicine, University of Pennsylvania Health System, Fred Hutchinson Cancer Center and MD Anderson Cancer Center MSKCC.

The Company also continues to sponsor a Phase I AML trial at MSKCC with a single-dose administration of Actimab™-A. Initial data shows elimination of leukemia cells from blood in 67% of all evaluable patients who received a full dose and in 83% of those treated at dose levels above 0.5 microcuries (uCi/kg), and eradication of leukemia cells in both blood and bone marrow in 20% of all evaluable patients and 25% of those treated at dose levels above 0.5 uCi/kg. Dose levels in that trial have been reduced as we continue our work on establishing maximum tolerated dose.

This Phase I trial builds on the experience with Company's first generation drug Bismab®-A that contains the same antibody used in Actimab™-A but labeled with bismuth 213, a less potent alpha emitting daughter of actinium 225 used in Actimab™-A. Bismab®-A trials and the Phase I Actimab™-A trial were focused on relapsed, refractory and other difficult to treat acute myeloid leukemia patients. The new multicenter Phase I/II trial is focused on newly diagnosed AML patients who have historically had better outcomes. In addition, the new trial includes low doses of chemotherapy with the goal of further improving patient outcomes.

Operations

The Company's current operations are primarily focused on furthering the development of its lead clinical drug candidates Actimab™-A and Iomab™-B. In the case of Actimab™-A, key ongoing activities include progressing a multi-center Phase I/II trial, support for an ongoing Phase I clinical trial at Memorial Sloan Kettering Cancer Center in New York, managing isotope and other materials supply chain, and managing the manufacturing of the finished drug candidate product. API has secured access to much of the currently available world reserves of Ac-225 and Bi-213 through a renewable contractual arrangement with the U.S. Department of Energy (DOE). The Company projects that these quantities are sufficient to support early stages of commercialization of alpha isotopes based products. API has also developed its own proprietary process for industrial scale Ac-225 production in a cyclotron in quantities adequate to support full product commercialization.

Operations related to Iomab™-B include planning for a registration trial which will include development of commercial scale manufacturing to be suitable for an approval trial and preparation of appropriate regulatory submissions.

Intellectual Property Portfolio

API's technology and products are protected by an extensive intellectual property estate in excess of 60 patents and patent applications, both in the U.S. and other countries. The cornerstones of the portfolio are patents and patent applications covering use of Ac-225 and Bi-213 for medical purposes and production of the Ac-225 isotope. Additional patents and applications relate to the API's proprietary manufacturing and treatment processes. Additionally, the Company believes that several of its programs are likely eligible for "Orphan Drug Protection" including its products intended for AML as well as bone marrow transplants. Orphan Drug Protection in the United States refers to the protection provided by the 1983 Orphan Drug Act which provides seven years of market exclusivity to drugs developed to address diseases that affect fewer than 200,000 patients in the United States. Similar protection exists in Europe and provides for ten years of marketing exclusivity.

Key Strengths

API believes that the key elements for its market success include:

- **Clinical results to date imply lower development risk for its lead drug candidates:** API's lead drug candidates have been tested in over 300 patients and demonstrated favorable safety and efficacy profiles. Iomab™-B has been administered to more than 250 patients in a number of Phase I and Phase II trials and has shown a clear survival benefit in the indication for which it is being developed. Bismab®-A and Actimab ™-A, drugs based on the APIT platform have so far been tested in over 60 patients in 3 clinical trials. In each trial they exhibited few side effects and have shown indications of efficacy. The current proof-of-concept Actimab™-A Phase I/II clinical trial is directed at a patient population that is generally easier to treat (newly diagnosed vs. relapsed/refractory in previous trials), and employs a more potent treatment regimen (low dose chemotherapy plus two doses of ActimabTM-A plus low dose chemotherapy vs. a single dose of ActimabTM-A in the physician sponsored trial).

- **Additional product opportunities from the APIT platform:** API's Alpha Particle Immunotherapy technology has the potential for broad applicability for the treatment of many cancer types, which allows the Company to add new product candidates to its pipeline based on well-defined patent protected methods. The next product from the platform is expected to be a second generation BC8 product linked to Ac-225, Actimab ™-B which could potentially significantly expand the market that is targeted by Iomab™-B.

- **Collaboration with Memorial Sloan-Kettering Cancer Center (MSKCC):** API's collaboration with MSKCC includes licensing, research and clinical trial arrangements involving MSKCC labs and clinicians and financial support with respect to certain pre-2012 R&D-related expenses.

- **Scientific backing of leading experts:** API's clinical advisory board and collaborators include some of the best recognized clinicians and scientists working at some of the highest regarded medical institutions in the U.S. and the world, including MSKCC, Johns Hopkins University, University of Pennsylvania, Fred Hutchinson Cancer Center and MD Anderson Cancer Center. This is expected to be beneficial to API both in clinical development and market acceptance assuming its drug candidates are approved.

- **Isotope supply secured for clinical trials:** API has a contractual relationship with ORNL (Oak Ridge National Laboratory of the Department of Energy (DOE)) that provides the Company access to the largest known supply reserves of actinium 225. Iodine 131 is readily available from a number of qualified pharmaceutical supply vendors.

- **Proprietary alpha emitting isotope manufacturing fully developed:** API has developed its own proprietary technology for commercial scale manufacturing of actinium 225. This is expected to ensure commercial supply of Ac-225 for Actimab™-A, Actimab™-B and other actinium-linked products should they be approved.

- **cGMP Actimab™-A manufacturing developed:** API has developed at a contractor's site full cGMP (current good manufacturing practices) manufacturing processes for its drug candidate Actimab™-A.

- **Substantial IP portfolio:** API has an intellectual property portfolio in excess of 60 patents and patent applications, both in the U.S. and other countries, which cover clinical applications of the APIT technology and methods of manufacturing actinium 225 thus giving API control over both the applications of its technology and a supply chain of its key ingredients, actinium 225 and bismuth 213 alpha emitting isotopes.

Competition Overview

To API's knowledge, there are no other commercial entities that have significant programs in place for developing Ac-225- or Bi-213-based drugs. In the wider field of medical oncology, the Company faces competition from: developers of other alpha emitter based drug candidates, other radioimmunotherapy based technologies, technologies for labeling antibodies with toxic drugs (antibody-drug conjugates), and for each disease indication from all drugs available and/or in development.

For Actinium's lead indication, acute myeloid leukemia, there are a number of companies developing drugs for AML induction in the elderly. These drugs are most often small molecules. Until recently, our leukemia targeting monoclonal antibody HuM195 was under development as a native i.e. unconjugated mAb by Seattle Genetics, Inc., but its development has been discontinued due to lack of efficacy of the native mAb in that company's pivotal trial in AML. To API's knowledge, there are no clinical trials that have shown significant efficacy in this indication.

In the field of hematopoietic stem cell transplantation, pharmaceuticals currently used for bone marrow ablation/conditioning are generic drugs and to API's knowledge there are no significant industry efforts to enter this area, especially not in older patients.

Government Regulation

Governmental authorities in the United States and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, distribution and marketing of radioimmunotherapy pharmaceutical products such as those being developed by API. In the United States, the U.S. Food and Drug Administration (FDA) regulates such products under the Federal Food, Drug and Cosmetic Act (FDCA) and implements regulations. Failure to comply with applicable FDA requirements, both before and after approval, may subject us to administrative and judicial sanctions, such as a delay in approving or refusal by the FDA to approve pending applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions and/or criminal prosecution.

U.S. Food and Drug Administration Regulation

Our research, development and clinical programs, as well as our manufacturing and marketing operations, are subject to extensive regulation in the United States and other countries. Most notably, all of our products sold in the United States are subject to the FDA as implemented and enforced by the FDA. Certain of our product candidates in the United States require FDA pre-marketing approval of a Biologics License Application (BLA) pursuant to 21 C.F.R. § 314. Foreign countries may require similar or more onerous approvals to manufacture or market these products.

Failure by us or by our suppliers to comply with applicable regulatory requirements can result in enforcement action by the FDA, the Nuclear Regulatory Commission or other regulatory authorities, which may result in sanctions, including but not limited to, untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties; customer notifications or repair, replacement, refunds, recall, detention or seizure of our products; operating restrictions or partial suspension or total shutdown of production; refusing or delaying our requests for BLA premarket approval of new products or modified products; withdrawing BLA approvals that have already been granted; and refusal to grant export.

Employees

As of December 28, 2012, we have 4 full-time employees and 1 part-time employee. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good. We also engage consultants on an as-needed basis to supplement existing staff.

Available Information

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Reports filed with the SEC pursuant to the Exchange Act, including annual and quarterly reports, and other reports we file, can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Investors may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. Investors can request copies of these documents upon payment of a duplicating fee by writing to the SEC. The reports we file with the SEC are also available on the SEC's website (http://www.sec.gov).

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information included in this Report, before making an investment decision. If any of the following risks actually occurs, our business, financial condition or results of operations could suffer. In that case, the trading price of our shares of common stock could decline and you may lose all or part of your investment. See "Cautionary Note Regarding Forward Looking Statements" above for a discussion of forward-looking statements and the significance of such statements in the context of this Report.

Risks Related to Our Business

We have generated no revenue from commercial sales to date and our future profitability is uncertain.

We have a limited operating history and our business is subject to all of the risks inherent in the establishment of a new business enterprise. Our likelihood of success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with this development and expansion. Since we began our business, we have focused on research, development and clinical trials of product candidates, and have incurred losses since inception. As of September 30, 2012, we had a deficit accumulated during development stage of approximately $52.8 million. If we continue to incur operating losses and fail to become a profitable company, we may be unable to continue our operations. We expect to continue to operate at a net loss for at least the next several years as we continue our research and development efforts, continue to conduct clinical trials and develop manufacturing, sales, marketing and distribution capabilities. There can be no assurance that the products under development by us will be approved for sale in the U.S. or elsewhere. Furthermore, there can be no assurance that if such products are approved they will be successfully commercialized, and the extent of our future losses and the timing of our profitability are highly uncertain.

If we fail to obtain the capital necessary to fund our operations, we will be unable to continue or complete our product development and you will likely lose your entire investment.

We do not currently have sufficient capital for the development and commercialization of our lead product and we will need to continue to seek capital from time to time to continue development of our lead drug candidates and to acquire and develop other product candidates. Our first product is not expected to be commercialized until at least 2016 and we do not expect that the partnering revenues it will generate will be sufficient to fund our ongoing operations. We believe that we may need to raise substantial additional capital to fund our continuing operations and the development and commercialization of our product candidates in or before the last quarter of 2013.

Our business or operations may change in a manner that would consume available funds more rapidly than anticipated and substantial additional funding may be required to maintain operations, fund expansion, develop new or enhanced products, acquire complementary products, business or technologies or otherwise respond to competitive pressures and opportunities, such as a change in the regulatory environment or a change in preferred cancer treatment modalities. However, we may not be able to secure funding when we need it or on favorable terms. API's Amended and Restated Certificate of Incorporation requires us to obtain the consent of our stockholders who hold a majority of our issued shares of stock and also the consent of a majority in interest of our Series E Preferred shareholders, prior to issuing any new shares of stock in consideration for new capital and also requires us, until one year after expiration of all lock-up agreements entered into in connection with the Share Exchange, to obtain the consent of the Placement Agent in order to increase or decrease the number of directors of the Company. In addition, API's Amended and Restated Stockholders Agreement provides certain of our stockholders with preemptive rights, which obligate us to offer them the right to purchase an amount of any stock issuances in proportion to the shares already owned by such stockholders. We may not be able to raise sufficient funds to commercialize our products if our stockholders do not consent to our future proposed capital raising activities.

If we cannot raise adequate funds to satisfy our capital requirements, we will have to delay, scale-back or eliminate our research and development activities, clinical studies or future operations. We may also be required to obtain funds through arrangements with collaborators, which arrangements may require us to relinquish rights to certain technologies or products that we otherwise would not consider relinquishing, including rights to future product candidates or certain major geographic markets. We may further have to license our technology to others. This could result in sharing revenues which we might otherwise have retained for ourselves. Any of these actions may harm our business, financial condition and results of operations.

The amount of capital we may need depends on many factors, including the progress, timing and scope of our product development programs; the progress, timing and scope of our preclinical studies and clinical trials; the time and cost necessary to obtain regulatory approvals; the time and cost necessary to further develop manufacturing processes and arrange for contract manufacturing; our ability to enter into and maintain collaborative, licensing and other commercial relationships; and our partners' commitment of time and resources to the development and commercialization of our products.

We have limited access to the capital markets and even if we can raise additional funding, we may be required to do so on terms that are dilutive to you.

We have limited access to the capital markets to raise capital. The capital markets have been unpredictable in the recent past for radio-immunotherapy and other oncology companies and unprofitable companies such as ours. In addition, it is generally difficult for development stage companies to raise capital under current market conditions. The amount of capital that a company such as ours is able to raise often depends on variables that are beyond our control. As a result, we may not be able to secure financing on terms attractive to us, or at all. If we are able to consummate a financing arrangement, the amount raised may not be sufficient to meet our future needs. If adequate funds are not available on acceptable terms, or at all, our business, including our technology licenses, results of operations, financial condition and our continued viability will be materially adversely affected.

If we fail to obtain or maintain necessary U.S. Food and Drug Administration clearances for our radio-immunotherapy products, or if such clearances are delayed, we will be unable to commercially distribute and market our products.

Our products are subject to rigorous regulation by the FDA and numerous other federal, state and foreign governmental authorities. The process of seeking regulatory clearance or approval to market a radio-immunotherapy product is expensive and time-consuming and, notwithstanding the effort and expense incurred, clearance or approval is never guaranteed. If we are not successful in obtaining timely clearance or approval of API products from the FDA, we may never be able to generate significant revenue and may be forced to cease operations. In particular, the FDA permits commercial distribution of a new radio-immunotherapy product only after the product has received approval of a Biologics License Application ("**BLA**") filed with the U.S. Food and Drug Administration pursuant to 21 C.F.R. § 314, seeking permission to market the product in interstate commerce in the United States. The BLA process is costly, lengthy and uncertain. Any BLA application filed by the Company will have to be supported by extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data, to demonstrate to the FDA's satisfaction the safety and efficacy of the product for its intended use.

Obtaining clearances or approvals from the FDA and from the regulatory agencies in other countries could result in unexpected and significant costs for us and consume management's time and other resources. The FDA and other agencies could ask us to supplement our submissions, collect non-clinical data, conduct additional clinical trials or engage in other time-consuming actions, or it could simply deny our applications. In addition, even if we obtain a BLA approval or pre-market approvals in other countries, the approval could be revoked or other restrictions imposed if post-market data demonstrates safety issues or lack of effectiveness. We cannot predict with certainty how, or when, the FDA will act. If we are unable to obtain the necessary regulatory approvals, our financial condition and cash flow may be materially adversely affected, and our ability to grow domestically and internationally may be limited. Additionally, even if cleared or approved, the Company's products may not be approved for the specific indications that are most necessary or desirable for successful commercialization or profitability.

Our radio-immunotherapy product candidates are in the early stages of development; and we have not demonstrated that any of our products actually cure cancer.

Only two product candidates of the Company are currently in clinical development by the Company. There is an ongoing Phase I AML trial at MSKCC under physician IND with a single dose of Actimab™-A. The Company has also commenced a Phase I/II multi-center AML trial with fractionated doses of Actimab ™-A. Additionally, there are a number of physician IND trials that have been conducted or are currently ongoing at FHCRC with single doses of Iomab™-A. Neither API nor any relevant collaborative partner(s) has yet undertaken any clinical assessment or investigation of API radio-immunotherapy product candidates for other indications, including colon cancer or prostate cancer. Significant further investment may be required to acquire antibody rights and to undertake necessary research and continued development. Further laboratory and specific clinical testing will be required prior to regulatory approval of any product candidates. Adverse or inconclusive results from pre-clinical testing or clinical trials of product candidates may substantially delay, or halt entirely, any further development of one or more of our products. The projected timetables for continued development of the technologies and related product candidates by us may otherwise be subject to delay or suspension.

Modifications to our product candidates may require new BLA approvals.

Once a particular API product candidate receives FDA approval or clearance, expanded uses or uses in new indications of our products may require additional human clinical trials and new regulatory approvals or clearances, including additional IND and BLA submissions and premarket approvals before we can begin clinical development, and/or prior to marketing and sales. If the FDA requires new clearances or approvals for a particular use or indication, we may be required to conduct additional clinical studies, which would require additional expenditures and harm our operating results. If the products are already being used for these new indications, we may also be subject to significant enforcement actions.

Conducting clinical trials and obtaining clearances and approvals can be a time-consuming process, and delays in obtaining required future clearances or approvals could adversely affect our ability to introduce new or enhanced products in a timely manner, which in turn would harm our future growth.

There is no guarantee that the FDA will grant BLA approval of our future product candidates and failure to obtain necessary clearances or approvals for our future product candidates would adversely affect our ability to grow our business.

We have recently commenced a multi-center Phase I/II clinical trial for our lead drug candidate, Actimab™-A, in AML and in the future expect to submit a BLA to the FDA for approval of this product. This drug candidate is also the subject of an ongoing human safety trial being conducted under a physician IND at Memorial Sloan Kettering Cancer Center in New York City. We are in the early stages of evaluating other drug candidates consisting of conjugates of Ac-225 with human or humanized antibodies for pre-clinical and clinical development in other types of cancer and the Company has recently acquired rights to Iomab™, a Phase II clinical stage monoclonal antibody with safety and efficacy data in more than 250 patients in need of HSCT. Product candidates utilizing this antibody would also require FDA approval of a BLA. The FDA may not approve or clear these products for the indications that are necessary or desirable for successful commercialization. Indeed, the FDA may refuse our requests for BLA market approval of new products, new intended uses or indications to existing or future product candidates. Failure to receive approval for our new products would have an adverse effect on our ability to expand our business.

Clinical trials necessary to support BLA approval of our future product candidates will be time consuming and expensive. Delays or failures in our clinical trials will prevent us from commercializing our product candidates and will adversely affect our business, operating results and prospects and could cause us to cease operations.

Initiating and completing clinical trials necessary to support BLA approval of Actimab™-A and other product candidates, will be time-consuming and expensive and the outcome uncertain. Moreover, the results of early clinical trials are not necessarily predictive of future results, and any product candidate we advance into clinical trials may not have favorable results in later clinical trials. We have worked with the FDA to develop a clinical trial designed to support initial safety and efficacy of Actimab ™-A and on October 6, 2008, and January 5, 2009, we submitted IND amendments to the FDA for the conduct of a multi-center Phase I/II clinical trial for treatment of AML. The trial is now underway with the purpose of examining the use of Actimab-A in AML patients who are not eligible for approved forms of treatment with curative intent. The trial is not designed to support final BLA approval of the product candidate and one or more additional trials will have to be conducted in the future before we file a BLA. In addition, there can be no assurance that the data generated during the trial will meet our chosen safety and effectiveness endpoints or otherwise produce results that will eventually support the filing or approval of a BLA.

Conducting successful clinical studies may require the enrollment of large numbers of patients, and suitable patients may be difficult to identify and recruit.

Patient enrollment in clinical trials and completion of patient participation and follow-up depends on many factors, including the size of the patient population; the nature of the trial protocol; the attractiveness of, or the discomforts and risks associated with, the treatments received by enrolled subjects; the availability of appropriate clinical trial investigators; support staff; and proximity of patients to clinical sites and ability to comply with the eligibility and exclusion criteria for participation in the clinical trial and patient compliance. For example, patients may be discouraged from enrolling in our clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and effectiveness of our product candidates or if they determine that the treatments received under the trial protocols are not attractive or involve unacceptable risks or discomforts. Patients may also not participate in our clinical trials if they choose to participate in contemporaneous clinical trials of competitive product candidates. In addition, patients participating in refractory AML clinical trials are seriously and often terminally ill and therefore may not complete the clinical trial due to reasons including comorbid conditions or occurrence of adverse medical events related or unrelated to the investigational products, or death.

Development of sufficient and appropriate clinical protocols to demonstrate safety and efficacy are required and we may not adequately develop such protocols to support clearance and approval.

The FDA may require us to submit data on a greater number of patients than we originally anticipated and/or for a longer follow-up period or change the data collection requirements or data analysis applicable to our clinical trials. They may also require additional data on certain categories of patients, should it emerge during the conduct of our clinical trials that certain categories of patients are likely to be affected in different and/or additional manner than most of the patients. In addition to FDA requirements, our clinical trial requires the approval of the institutional review board, or IRB, at each site selected for participation in our current Actimab™-A clinical trial. We have submitted our clinical trial to the IRBs at participating sites for approval and we have thus far obtained approval from two IRBs, and are engaged in discussions with investigators at other sites to in order to complete the approval process with their respective hospital centers. The Company's clinical trial protocols have not been rejected by any IRB.

Additional delays to the completion of clinical studies may result from modifications being made to the protocol during the clinical trial, if such modifications are warranted and/or required by the occurrences in the given trial.

Each such modification has to be submitted to the FDA. This could result in the delay or halt of a clinical trial while the modification is evaluated. In addition, depending on the quantity and nature of the changes made, FDA could take the position that some or all of the data generated by the clinical trial is not usable because the same protocol was not used throughout the trial. This might require the enrollment of additional subjects, which could result in the extension of the clinical trial and the FDA delaying clearance or approval of a product candidate.

There can be no assurance that the data generated using modified protocols will be acceptable to FDA.

There can be no assurance that the data generated using modified protocols will be acceptable to FDA or that if future modifications during the trial are necessary, that any such modifications will be acceptable to FDA. If the FDA believes that its prior approval is required for a particular modification, it can delay or halt a clinical trial while it evaluates additional information regarding the change.

Serious injury or death resulting from a failure of one of our drug candidates during current or future clinical trials could also result in the FDA delaying our clinical trials or denying or delaying clearance or approval of a product.

The ongoing Phase I clinical trial for Actimab™-A conducted at MSKCC was designed to establish the maximum tolerated dose of the product. As the Company expected, patients receiving highest dose of the drug administered in the trial so far had prolonged bone marrow suppression which could lead to fatal infections and other severe consequences. Consequently, the dose levels of our drug in that trial were reduced as we continue our work on establishing maximum tolerated dose.

Even though an adverse event may not be the result of the failure of our drug candidate, FDA or an IRB could delay or halt a clinical trial for an indefinite period of time while an adverse event is reviewed, and likely would do so in the event of multiple such events.

Any delay or termination of our current or future clinical trials as a result of the risks summarized above, including delays in obtaining or maintaining required approvals from IRBs, delays in patient enrollment, the failure of patients to continue to participate in a clinical trial, and delays or termination of clinical trials as a result of protocol modifications or adverse events during the trials, may cause an increase in costs and delays in the filing of any submissions with the FDA, delay the approval and commercialization of our product candidates or result in the failure of the clinical trial, which could adversely affect our business, operating results and prospects. Lengthy delays in the completion of our Actimab™-A clinical trials would adversely affect our business and prospects and could cause us to cease operations.

If the third parties on which we rely to conduct our clinical trials and to assist us with pre-clinical development do not perform as contractually required or expected, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We do not have the ability to independently conduct our pre-clinical and clinical trials for our product candidates and we must rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct such trials. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if these third parties need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our pre-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, our product candidates on a timely basis, if at all, and our business, operating results and prospects may be adversely affected. Furthermore, our third-party clinical trial investigators may be delayed in conducting our clinical trials for reasons outside of their control.

The future results of our current or future clinical trials may not support our product candidate claims or may result in the discovery of unexpected adverse side effects.

Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product candidate claims or that the FDA or foreign authorities will agree with our conclusions regarding them. Success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the later trials will replicate the results of prior trials and pre-clinical studies. The clinical trial process may fail to demonstrate that our product candidates are safe and effective for the proposed indicated uses. If FDA concludes that the clinical trials for Actimab™-A, or any other product candidate for which we might seek clearance, have failed to demonstrate safety and effectiveness, we would not receive FDA clearance to market that product candidate in the United States for the indications sought. In addition, such an outcome could cause us to abandon the product candidate and might delay development of others. Any delay or termination of our clinical trials will delay the filing of any submissions with the FDA and, ultimately, our ability to commercialize our product candidates and generate revenues. It is also possible that patients enrolled in clinical trials will experience adverse side effects that are not currently part of a product candidate's profile. In addition, our clinical trials for Actimab™-A involve a relatively small patient population. Because of the small sample size, their results may not be indicative of future results.

Actimab™-A and future product candidates may never achieve market acceptance.

Actimab™-A and future product candidates that we may develop may never gain market acceptance among physicians, patients and the medical community. The degree of market acceptance of any of product will depend on a number of factors, including the actual and perceived effectiveness and reliability of the product; the results of any long−term clinical trials relating to use of the product; the availability, relative cost and perceived advantages and disadvantages of alternative technologies; the degree to which treatments using the product are approved for reimbursement by public and private insurers; the strength of our marketing and distribution infrastructure; and the level of education and awareness among physicians and hospitals concerning the product.

Failure of Actimab™-A or any of our other product candidates to significantly penetrate current or new markets would negatively impact our business, financial condition and results of operations.

To be commercially successful, physicians must be persuaded that using our product candidates for treatment of AML and other cancers are effective alternatives to existing therapies and treatments.

We believe that oncologists and other physicians will not widely adopt a product candidate unless they determine, based on experience, clinical data, and published peer-reviewed journal articles, that the use of that product candidate provides an effective alternative to other means of treating specific cancers. Patient studies or clinical experience may indicate that treatment with our product candidates does not provide patients with sufficient benefits in extension of life or quality of life. We believe that recommendations and support for the use of each product candidate from influential physicians will be essential for widespread market acceptance. Our product candidates are still in the development stage and it is premature to attempt to gain support from physicians at this time. We can provide no assurance that such support will ever be obtained. If our product candidates do not receive such support from these physicians and from long-term data, physicians may not use or continue to use, and hospitals may not purchase or continue to purchase, them.

Even if our product candidates are approved by regulatory authorities, if we or our suppliers fail to comply with ongoing FDA regulation or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Any product candidate for which we obtain FDA clearance or approval, and the manufacturing processes, reporting requirements, post-approval clinical data and promotional activities for such product candidate, will be subject to continued regulatory review, oversight and periodic inspections by the FDA. In particular, we and our suppliers are required to comply with FDA's Quality System Regulations, or QSR, and International Standards Organization, or ISO, regulations for the manufacture of products and other regulations which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of any product candidate for which we obtain clearance or approval. Additionally, because our product candidates include radio-active isotopes, they will be subject to additional regulation and oversight from the United States Nuclear Regulatory Commission (NRC) and similar bodies in other jurisdictions. Regulatory bodies, such as the FDA, enforce these regulations through periodic inspections. The failure by us or one of our suppliers to comply with applicable statutes and regulations administered by the FDA and other regulatory bodies, or the failure to timely and adequately respond to any adverse inspectional observations or safety issues, could result in, among other things, enforcement actions by the FDA and/or other regulatory bodies.

If any of these actions were to occur, it would harm our reputation and cause our future product sales and profitability to suffer and may prevent us from generating revenue. Furthermore, our key component suppliers may not currently be or may not continue to be in compliance with all applicable regulatory requirements which could result in our failure to produce our product candidates on a timely basis and in the required quantities, if at all.

Even if regulatory clearance or approval of a product candidate is granted, such clearance or approval may be subject to limitations on the intended uses for which a product may be marketed and reduce the potential to successfully commercialize that product and generate revenue from that product. If the FDA determines that the product promotional materials, labeling, training or other marketing or educational activities constitute promotion of an unapproved use, it could request that we or our commercialization partners cease or modify our training or promotional materials or subject us to regulatory enforcement actions. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider such training or other promotional materials to constitute promotion of an unapproved use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement.

In addition, we may be required to conduct costly post-market testing and surveillance to monitor the safety or effectiveness of our products, and we must comply with adverse event and phamacovigilence reporting requirements, including the reporting of adverse events which occur in connection with, and whether or not directly related to, our products. Later discovery of previously unknown problems with our products, including unanticipated adverse events or adverse events of unanticipated severity or frequency, manufacturing problems, or failure to comply with regulatory requirements, may result in changes to labeling, restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recalls, a requirement to recall, replace or refund the cost of any product we manufacture or distribute, fines, suspension of regulatory approvals, product seizures, injunctions or the imposition of civil or criminal penalties which would adversely affect our business, operating results and prospects.

Our revenue stream will depend upon third party reimbursement.

The commercial success of our product candidates in both domestic and international markets will be substantially dependent on whether third-party coverage and reimbursement is available for patients that use our products. However, the availability of insurance coverage and reimbursement for newly approved cancer therapies is uncertain, and therefore, third-party coverage may be particularly difficult to obtain even if our products are approved by the FDA as safe and efficacious. Patients using existing approved therapies are generally reimbursed all or part of the product cost by Medicare or other third-party payors. Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs, and, as a result, they may not cover or provide adequate payment for these products. Submission of applications for reimbursement approval generally does not occur prior to the filing of an NDA for that product and may not be granted until many months after NDA approval. In order to obtain reimbursement arrangements for these products, we or our commercialization partners may have to agree to a net sales price lower than the net sales price we might charge in other sales channels. The continuing efforts of government and third-party payors to contain or reduce the costs of healthcare may limit our revenue. Initial dependence on the commercial success of our products may make our revenues particularly susceptible to any cost containment or reduction efforts.

We are dependent on third parties for manufacturing and marketing of our proposed proprietary products. If we are not able to secure favorable arrangements with such third parties, our business and financial condition would be harmed.

We will not manufacture any of our proposed proprietary products for commercial sale nor do we have the resources necessary to do so. In addition, we currently do not have the capability to market drug products ourselves. We intend to contract with specialized manufacturing companies to manufacture our proposed proprietary products and partner with larger pharmaceutical companies for their commercialization. In connection with our efforts to commercialize our proposed proprietary products, we will seek to secure favorable arrangements with third parties to distribute, promote, market and sell them. If we are not able to secure favorable commercial terms or arrangements with third parties for distribution, marketing, promotion and sales of our proposed proprietary products, we may have to retain promotional and marketing rights and seek to develop the commercial resources necessary to promote or co-promote or co-market certain or all of our proprietary product candidates to the appropriate channels of distribution in order to reach the specific medical market that we are targeting. We may not be able to enter into any partnering arrangements on this or any other basis. If we are not able to secure favorable partnering arrangements, or are unable to develop the appropriate resources necessary for the commercialization of our proposed proprietary products, our business and financial condition could be harmed. In addition, we will have to hire additional employees or consultants, since our current employees have limited experience in these areas. Sufficient employees with relevant skills may not be available to us. Any increase in the number of our employees would increase our expense level, and could have an adverse effect on our financial position.

In addition, we, or our potential commercial partners, may not successfully introduce our proposed proprietary products or they may not achieve acceptance by patients, health care providers and insurance companies. Further, it is possible that we may not be able to secure arrangements to manufacture, market, distribute, promote and sell our proposed proprietary products at favorable commercial terms that would permit us to make a profit. To the extent that corporate partners conduct clinical trials, we may not be able to control the design and conduct of these clinical trials.

We may have conflicts with our partners that could delay or prevent the development or commercialization of our product candidates.

We may have conflicts with our partners, such as conflicts concerning the interpretation of preclinical or clinical data, the achievement of milestones, the interpretation of contractual obligations, payments for services, development obligations or the ownership of intellectual property developed during our collaboration. If any conflicts arise with any of our partners, such partner may act in a manner that is adverse to our best interests. Any such disagreement could result in one or more of the following, each of which could delay or prevent the development or commercialization of our product candidates, and in turn prevent us from generating revenues: unwillingness on the part of a partner to pay us milestone payments or royalties we believe are due under a collaboration; uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations; unwillingness by the partner to cooperate in the development or manufacture of the product, including providing us with product data or materials; unwillingness on the part of a partner to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities; initiating litigation or alternative dispute resolution options by either party to resolve the dispute; or attempts by either party to terminate the agreement.

Upon commercialization of our product candidates, we may be dependent on third parties to market, distribute and sell them.

Our ability to receive revenues may be dependent upon the sales and marketing efforts of any future co-marketing partners and third-party distributors. At this time, we have not entered into an agreement with any commercialization partner and only plan to do so after the successful completion of Phase II clinical trials and prior to commercialization. If we fail to reach an agreement with any commercialization partner, or if upon reaching such an agreement that partner fails to sell a large volume of our products, it may have a negative impact on our business, financial condition and results of operations.

Our product candidates will face significant competition in the markets for them, and if they are unable to compete successfully, our business will suffer.

Our product candidates face, and will continue to face, intense competition from large pharmaceutical companies, as well as academic and research institutions. We compete in an industry that is characterized by (i) rapid technological change, (ii) evolving industry standards, (iii) emerging competition and (iv) new product introductions. Our competitors have existing products and technologies that will compete with our product candidates and technologies and may develop and commercialize additional products and technologies that will compete with our product candidates and technologies. Because several competing companies and institutions have greater financial resources than us, they may be able to (i) provide broader services and product lines, (ii) make greater investments in research and development, or R&D, and (iii) carry on broader R&D initiatives. Our competitors also have greater development capabilities than we do and have substantially greater experience in undertaking preclinical and clinical testing of product candidates, obtaining regulatory approvals, and manufacturing and marketing pharmaceutical products. They also have greater name recognition and better access to customers than us. Our chief competitors include companies such as Bayer Schering Pharma AG, GlaxoSmithKline Plc, Spectrum Pharmaceuticals, Inc. and Algeta ASA.

Adverse events involving our products may lead the FDA to delay or deny clearance for our product candidates or result in product recalls that could harm our reputation, business and financial results.

Once a product candidate receives FDA clearance or approval, the agency has the authority to require the recall of commercialized products in the event of adverse side effects, material deficiencies or defects in design or manufacture. The authority to require a recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious injury or death. Manufacturers may, under their own initiative, recall a product if any material deficiency in a product is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of adverse side effects, impurities or other product contamination, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our financial condition and results of operations. The FDA requires that certain classifications of recalls be reported to FDA within 10 working days after the recall is initiated. Companies are required to maintain certain records of recalls, even if they are not reportable to the FDA. We may initiate voluntary recalls involving our products in the future that we determine do not require notification of the FDA. If the FDA disagrees with our determinations, they could require us to report those actions as recalls. A future recall announcement could harm our reputation with customers and negatively affect our sales. In addition, the FDA could take enforcement action for failing to report the recalls when they were conducted.

Our business depends upon securing and protecting critical intellectual property.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret, copyright and trademark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties to the extent that valid and enforceable intellectual property protection, such as patents or trade secrets law, cover them. In particular, we place considerable emphasis on obtaining patent and trade secret protection for significant new technologies, products and processes. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. Moreover, the degree of future protection of our proprietary rights is uncertain for product candidates that are currently in the early stages of development because we cannot predict which of these product candidates will ultimately reach the commercial market or whether the commercial versions of these product candidates will incorporate proprietary technologies.

Our patent position is highly uncertain and involves complex legal and factual questions.

Accordingly, we cannot predict the breadth of claims that may be allowed or enforced under our patents or in third-party patents. For example, we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents; we or our licensors might not have been the first to file patent applications for these inventions; others may independently develop similar or alternative technologies or duplicate any of our technologies; it is possible that none of our pending patent applications or the pending patent applications of our licensors will result in issued patents; our issued patents and issued patents of our licensors may not provide a basis for commercially viable technologies, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties; and, we may not develop additional proprietary technologies that are patentable.

As a result, our owned and licensed patents may not be valid and we may not be able to obtain and enforce patents and to maintain trade secret protection for the full commercial extent of our technology. The extent to which we are unable to do so could materially harm our business.

We or our licensors have applied for and will continue to apply for patents for certain products. Such applications may not result in the issuance of any patents, and any patents now held or that may be issued may not provide us with adequate protection from competition. Furthermore, it is possible that patents issued or licensed to us may be challenged successfully. In that event, if we have a preferred competitive position because of such patents, such preferred position would be lost. If we are unable to secure or to continue to maintain a preferred position, we could become subject to competition from the sale of generic products. Failure to receive, inability to protect, or expiration of our patents for medical use, manufacture, conjugation and labeling of Ac-225, the antibodies that we license from third parties, or subsequent related filings, would adversely affect our business and operations.

Patents issued or licensed to us may be infringed by the products or processes of others. The cost of enforcing our patent rights against infringers, if such enforcement is required, could be significant, and the Company does not currently have the financial resources to fund such litigation. Further, such litigation can go on for years and the time demands could interfere with our normal operations. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical industry. We may become a party to patent litigation and other proceedings. The cost to us of any patent litigation, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation more effectively than we can because of their substantially greater financial resources. Litigation may also absorb significant management time.

Unpatented trade secrets, improvements, confidential know-how and continuing technological innovation are important to our scientific and commercial success. Although we attempt to and will continue to attempt to protect our proprietary information through reliance on trade secret laws and the use of confidentiality agreements with our partners, collaborators, employees and consultants and other appropriate means, these measures may not effectively prevent disclosure of our proprietary information, and, in any event, others may develop independently, or obtain access to, the same or similar information.

Certain of our patent rights are licensed to us by third parties. If we fail to comply with the terms of these license agreements, our rights to those patents may be terminated, and we will be unable to conduct our business.

If we are found to be infringing on patents or trade secrets owned by others, we may be forced to cease or alter our product development efforts, obtain a license to continue the development or sale of our products, and/or pay damages.

Our manufacturing processes and potential products may violate proprietary rights of patents that have been or may be granted to competitors, universities or others, or the trade secrets of those persons and entities. As the pharmaceutical industry expands and more patents are issued, the risk increases that our processes and potential products may give rise to claims that they infringe the patents or trade secrets of others. These other persons could bring legal actions against us claiming damages and seeking to enjoin clinical testing, manufacturing and marketing of the affected product or process. If any of these actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to conduct clinical tests, manufacture or market the affected product or use the affected process. Required licenses may not be available on acceptable terms, if at all, and the results of litigation are uncertain. If we become involved in litigation or other proceedings, it could consume a substantial portion of our financial resources and the efforts of our personnel.

Our ability to protect and enforce our patents does not guaranty that we will secure the right to commercialize our patents.

A patent is a limited monopoly right conferred upon an inventor, and his successors in title, in return for the making and disclosing of a new and non-obvious invention. This monopoly is of limited duration but, while in force, allows the patent holder to prevent others from making and/or using its invention. While a patent gives the holder this right to exclude others, it is not a license to commercialize the invention where other permissions may be required for commercialization to occur. For example, a drug cannot be marketed without the appropriate authorization from the FDA, regardless of the existence of a patent covering the product. Further, the invention, even if patented itself, cannot be commercialized if it infringes the valid patent rights of another party.

We rely on confidentiality agreements to protect our trade secrets. If these agreements are breached by our employees or other parties, our trade secrets may become known to our competitors.

We rely on trade secrets that we seek to protect through confidentiality agreements with our employees and other parties. If these agreements are breached, our competitors may obtain and use our trade secrets to gain a competitive advantage over us. We may not have any remedies against our competitors and any remedies that may be available to us may not be adequate to protect our business or compensate us for the damaging disclosure. In addition, we may have to expend resources to protect our interests from possible infringement by others.

The issued patents, which are licensed by API for the HuM-195 antibody, our acute myeloid leukemia targeting antibody, will begin to expire before we have commercialized Actimab™-A.

The humanized antibody which we use in the conjugated Actimab ™-A product candidate is covered by the claims of issued patents that we license from Facet Biotech Corporation, a wholly-owned subsidiary of Abbott Laboratories ("Facet"). Some of those patents will begin to expire in 2013. After these patents expire, others may be eventually able to use an antibody with the same sequence in alpha particle drug products based on alpha particle emitters other than actinium 225 and bismuth 213. Any process that would enable such a competition as described above is likely to require several years of development before achieving our product candidate's current status and may be subject to significant regulatory hurdles, but is nevertheless a possibility that can affect the Company's business in the future.

Additionally, because we expect that certain of these patents will expire prior to commercialization of Actimab ™-A, API expects that in order to attract a commercialization partner for that product candidate, it will may need to reach an agreement with Facet to reduce the milestone payments and royalties currently required to be paid under our license agreement for HuM-195. There can be no assurance that the parties will be able to agree on an amendment to the terms of the license. Failure to reach such an agreement could materially adversely affect API's ability to find a commercialization partner for Actimab™-A which may materially harm our business.

The BC8 antibody utilized in Iomab™-B is not patent protected.

The antibody we use in the conjugated Iomab™ product candidate is not covered by the claims of any issued or pending patents. Accordingly, others may be eventually able to use an antibody with the same sequence in alpha particle drug products based on alpha particle emitters. Any process that would enable such a competition as described above is likely to require several years of development before achieving our product candidate's current status and may be subject to significant regulatory hurdles, but is nevertheless a possibility that could negatively impact the Company's business in the future.

We may be unable to obtain a sufficient supply of Ac-225 medical grade isotope in order to continue clinical trials and to allow for the manufacture of commercial quantities of Actimab-A

There are limited quantities of Ac-225 available today. The existing supplier of Ac-225 to the Company is Oak Ridge National Laboratory (ORNL). It manufactures Ac-225 by eluting it from its supply of Thorium-229. Although this has proven to be a very reliable source of production for a number of years, it is limited by the quantity of Thorium-229 at ORNL. We believe that the current approximate maximum of Ac-225 production from this source is sufficient for approximately 1,000 - 2,000 patient treatments per year. Since our needs are significantly below that amount at this time, and will continue to be below that for as long as we do not have a commercial product with a potential of selling more than 2,000 patient doses per year, we believe that this supply will be sufficient for completion of clinical trials and early commercialization. To secure supplies beyond this amount, the Company has developed what it believes to be a scalable cost-effective process for manufacturing Ac-225 in a cyclotron at an estimated cost in excess of $5 million. This work has been conducted at Technical University Munich (TUM) in Germany. API is now in possession of detailed descriptions of all the developed manufacturing procedures and has rights to all relevant patent applications and other intellectual property. However, we do not currently have access to a commercial cyclotron capable of producing medical grade Ac-225. Although beam time on such cyclotrons is commercially available, the Company does not currently have a relationship with any entity that owns or controls a suitable cyclotron. It has identified possible sources and estimates that it could secure the necessary beam time when needed at a cost of approximately $2 million per year. The Company's contract for supply of this isotope from ORNL extends through the end of 2012, is renewable for future years, and has already been renewed for several consecutive years. However, there can be no assurance that ORNL will decide to renew the contract or that the U.S. Department of Energy will not change its policies that allow for the sale of isotope to API. Failure to acquire sufficient quantities of medical grade Ac-225 would make it impossible to effectively complete clinical trials and to commercialize Actimab™-A and would materially harm our business.

We may undertake international operations, which will subject us to risks inherent with operations outside of the United States.

Although we do not have any foreign operations at this time, we intend to seek market clearances in foreign markets that we believe will generate significant opportunities. However, even with the cooperating of a commercialization partner, conducting drug development in foreign countries involves inherent risks, including, but not limited to difficulties in staffing, funding and managing foreign operations; unexpected changes in regulatory requirements; export restrictions; tariffs and other trade barriers; difficulties in protecting, acquiring, enforcing and litigating intellectual property rights; fluctuations in currency exchange rates; and potentially adverse tax consequences.

If we were to experience any of the difficulties listed above, or any other difficulties, any international development activities and our overall financial condition may suffer and cause us to reduce or discontinue our international development and registration efforts.

We may not be successful in hiring and retaining key employees.

Our future operations and successes depend in large part upon the continued service of key members of our senior management team whom we are highly dependent upon to manage our business, in particular Mr. Jack V. Talley, our President and Chief Executive Officer and Dr. Dragan Cicic, our Chief Operating Officer and Chief Medical Officer. If any member of our current senior management terminates his or her employment with us, such a departure may have a material adverse effect on our business.

Our future success also depends on our ability to identify, attract, hire or engage, retain and motivate other well-qualified managerial, technical, clinical and regulatory personnel. There can be no assurance that such professionals will be available in the market, or that we will be able to retain existing professionals or meet or continue to meet their compensation requirements. Furthermore, the cost base in relation to such compensation, which may include equity compensation, may increase significantly, which could have a material adverse effect on us. Failure to establish and maintain an effective management team and work force could adversely affect our ability to operate, grow and manage our business.

Managing our growth as we expand operations may strain our resources.

We expect to need to grow rapidly in order to support additional, larger, and potentially international, pivotal clinical trials of our drug candidates, which will place a significant strain on our financial, managerial and operational resources. In order to achieve and manage growth effectively, we must continue to improve and expand our operational and financial management capabilities. Moreover, we will need to increase staffing and to train, motivate and manage our employees. All of these activities will increase our expenses and may require us to raise additional capital sooner than expected. Failure to manage growth effectively could materially harm our business, financial condition or results of operations.

We may expand our business through the acquisition of rights to new product candidates that could disrupt our business, harm our financial condition and may also dilute current stockholders' ownership interests in our company.

Our business strategy includes expanding our products and capabilities, and we may seek acquisitions of drug candidates, antibodies or technologies to do so. Acquisitions involve numerous risks, including substantial cash expenditures; potentially dilutive issuance of equity securities; incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition; difficulties in assimilating acquired technologies or the operations of the acquired companies; diverting our management's attention away from other business concerns; risks of entering markets in which we have limited or no direct experience; and the potential loss of our key employees or key employees of the acquired companies.

We can make no assurances that any acquisition will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired product, company or business. In addition, our future success would depend in part on our ability to manage the rapid growth associated with some of these acquisitions. We cannot assure that we will be able to make the combination of our business with that of acquired products, businesses or companies work or be successful. Furthermore, the development or expansion of our business or any acquired products, business or companies may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our preferred or common stock, which could dilute each current stockholder's ownership interest in the Company.

Risks Related to Ownership of Our Common Stock

Shares of our capital stock are not registered under the Securities Act of 1933 and there is a lack of liquidity for our securities.

Though our Common Stock is listed on the OTC Bulletin Board (the "OTCBB"), there is little to no market for our Common Stock. Investors may have to bear the economic risk of an investment in the Company for an indefinite period of time. At this time, the offer and sale of our securities will not be registered under the Securities Act or any state securities laws. Each purchaser of Common Stock will be required to represent that it is purchasing such stock for its own account for investment purposes and not with a view to resale or distribution. No transfer of Common Stock issued may be made unless such transfer is registered under the Securities Act and applicable state securities laws, or an exemption therefrom is available, which will be noted on a restrictive legend placed on each Common Stock certificate. In connection with any such transfer, we may require the transferor to provide us with an opinion of legal counsel stating that the transfer complies with such securities laws and to pay any costs we incur in connection with such transfer and our review thereof as a precondition to the effectiveness of the transfer. There is no public trading market for the shares of Common Stock issued or issuable upon the exercise of the Warrants and such trading market may never exist.

Resale of our securities is subject to significant restrictions.

Any of our securities that are sold are under exemptions from registration under applicable federal and state securities laws, as none of our securities have not been registered under the Securities Act or any state securities laws. Until our securities have been registered, they may not be transferred or resold except in a transaction exempt from or not subject to the registration requirements of the Securities Act and applicable state securities laws. The SEC has broad discretion to determine whether any registration statement will be declared effective and may delay or deny the effectiveness of any registration statement filed by us for a variety of reasons. In the event that the effectiveness of any registration statement relating to resales of the shares of our securities is delayed or denied, or the registration statement, once effective, becomes unavailable for use by selling security holders, the transferability of the shares of Common Stock may be restricted and the value of such securities could be materially adversely affected.

If our ability to register our shares is limited, the ability of holders of our shares to sell them may be subject to substantial restrictions, and you may be required to hold such securities for a period of time prior to sale, in which case you could suffer a substantial loss on such shares.

If our ability to register the resale of shares of our Common Stock is limited, you may not be able to exercise all or some of your Warrants for shares of our Common Stock that are registered for resale. There will be substantial restrictions on your ability to transfer any shares which are not registered for resale, and you may be required to hold the shares you receive upon exercise of your Warrants for some period of time after exercise. During such time, the market price of our Common Stock may fluctuate and you could suffer a substantial or total loss with respect to such shares.

Because we became public by means of a "reverse merger," we may not be able to attract the attention of major brokerage firms.

Additional risks may exist since we will become public through a "reverse merger." Securities analysts of major brokerage firms may not provide coverage of us since there is little incentive to brokerage firms to recommend the purchase of our common stock. We cannot assure you that brokerage firms will want to conduct any secondary offerings on behalf of our company in the future. On December 19, 2012 and in contemplation of the closing of the Share Exchange, Actinium closed on the Minimum Offering Amount selling an aggregate of 9,366,273Units to Investors, pursuant to Subscription Agreements and Unit Purchase Agreements for gross proceeds in the amount of $5,151,450, and net proceeds in the amount of $4,469,776 after legal and other fees and expenses remitted to the Placement Agent. Post the closing of the Share Exchange, the Offering will continue on the same terms on a pro-forma basis with the common shares offered at $1.65 per share, the 120 day warrants exercise price at $1.65 per share and the 5 year warrants exercise price at $2.48 per share.

The sale of securities by us in any equity or debt financing could result in dilution to our existing stockholders and have a material adverse effect on our earnings.

Any sale of common stock by us in a future private placement offering could result in dilution to the existing stockholders as a direct result of our issuance of additional shares of our capital stock. In addition, our business strategy may include expansion through internal growth, by acquiring subscribers email lists, or by establishing strategic relationships with targeted customers and vendor. In order to do so, or to finance the cost of our other activities, we may issue additional equity securities that could dilute our stockholders' stock ownership. We may also assume additional debt and incur impairment losses related to goodwill and other tangible assets if we acquire another company and this could negatively impact our earnings and results of operations.

Future sales of our common stock in the public market could lower the price of our common stock and impair our ability to raise funds in future securities offerings.

Future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the then prevailing market price of our common stock and could make it more difficult for us to raise funds in the future through a public offering of our securities.

Our Common Stock is quoted on the OTCBB which may have an unfavorable impact on our stock price and liquidity.

Our common stock is quoted on the OTCBB, which is a significantly more limited trading market than the New York Stock Exchange or The NASDAQ Stock Market. The quotation of the Company's shares on the OTCBB may result in a less liquid market available for existing and potential stockholders to trade shares of our common stock, could depress the trading price of our common stock and could have a long-term adverse impact on our ability to raise capital in the future.

There is limited liquidity on the OTCBB which may result in stock price volatility and inaccurate quote information.

When fewer shares of a security are being traded on the OTCBB, volatility of prices may increase and price movement may outpace the ability to deliver accurate quote information. Due to lower trading volumes in shares of our common stock, there may be a lower likelihood of one's orders for shares of our common stock being executed, and current prices may differ significantly from the price one was quoted at the time of one's order entry.

Our common stock is extremely thinly traded, so you may be unable to sell at or near asking prices or at all if you need to sell your shares to raise money or otherwise desire to liquidate your shares.

Currently, the Company's common stock is quoted in the OTCBB and future trading volume may be limited by the fact that many major institutional investment funds, including mutual funds, as well as individual investors follow a policy of not investing in OTCBB stocks and certain major brokerage firms restrict their brokers from recommending OTCBB stocks because they are considered speculative, volatile and thinly traded. The OTCBB market is an inter-dealer market much less regulated than the major exchanges and our common stock is subject to abuses, volatility and shorting. Thus, there is currently no broadly followed and established trading market for the Company's common stock. An established trading market may never develop or be maintained. Active trading markets generally result in lower price volatility and more efficient execution of buy and sell orders. Absence of an active trading market reduces the liquidity of the shares traded there.

The trading volume of our common stock has been and may continue to be extremely limited and sporadic. As a result of such trading activity, the quoted price for the Company's common stock on the OTCBB may not necessarily be a reliable indicator of its fair market value. Further, if we cease to be quoted, holders would find it more difficult to dispose of our common stock or to obtain accurate quotations as to the market value of the Company's common stock and as a result, the market value of our common stock likely would decline.

Our Common Stock is subject to price volatility unrelated to our operations.

After the closing of the Share Exchange we expect the market price of our Common Stock to fluctuate substantially due to a variety of factors, including market perception of our ability to achieve our planned growth, quarterly operating results of other companies in the same industry, trading volume in our common stock, changes in general conditions in the economy and the financial markets or other developments affecting the Company's competitors or the Company itself. In addition, the OTCBB is subject to extreme price and volume fluctuations in general. This volatility has had a significant effect on the market price of securities issued by many companies for reasons unrelated to their operating performance and could have the same effect on our common stock.

We are subject to penny stock regulations and restrictions and you may have difficulty selling shares of our common stock.

We are subject to the provisions of Section 15(g) and Rule 15g-9 of the Exchange Act, commonly referred to as the "penny stock rule." Section 15(g) sets forth certain requirements for transactions in penny stock, and Rule 15g-9(d) incorporates the definition of "penny stock" that is found in Rule 3a51-1 of the Exchange Act. The SEC generally defines a penny stock to be any equity security that has a market price less than $5.00 per share, subject to certain exceptions. We will be subject to the SEC's penny stock rules.

Since our Common Stock is deemed to be penny stock, trading in the shares of our common stock is subject to additional sales practice requirements on broker-dealers who sell penny stock to persons other than established customers and accredited investors. "Accredited investors" are persons with assets in excess of $1,000,000 (excluding the value of such person's primary residence) or annual income exceeding $200,000 or $300,000 together with their spouse. For transactions covered by these rules, broker-dealers must make a special suitability determination for the purchase of such security and must have the purchaser's written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt the rules require the delivery, prior to the first transaction of a risk disclosure document, prepared by the SEC, relating to the penny stock market. A broker-dealer also must disclose the commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements must be sent disclosing recent price information for the penny stocks held in an account and information to the limited market in penny stocks. Consequently, these rules may restrict the ability of broker-dealer to trade and/or maintain a market in our common stock and may affect the ability of the Company's stockholders to sell their shares of common stock.

There can be no assurance that our shares of common stock will qualify for exemption from the Penny Stock Rule. In any event, even if our common stock was exempt from the Penny Stock Rule, we would remain subject to Section 15(b)(6) of the Exchange Act, which gives the SEC the authority to restrict any person from participating in a distribution of penny stock if the SEC finds that such a restriction would be in the public interest.

Because we do not intend to pay dividends, stockholders will benefit from an investment in our Common Stock only if it appreciates in value.

We have never declared or paid any cash dividends on our Preferred Stock or Common Stock. For the foreseeable future, it is expected that earnings, if any, generated from our operations will be used to finance the growth of our business, and that no dividends will be paid to holders of the Company's Preferred Stock or Common Stock. As a result, the success of an investment in our Preferred Stock or Common Stock will depend upon any future appreciation in its value. There is no guarantee that our Preferred Stock or Common Stock will appreciate in value.

Certain provisions of our Articles of Incorporation and Bylaws and Nevada law make it more difficult for a third party to acquire us and make a takeover more difficult to complete, even if such a transaction were in the stockholders' interest.

Our Articles of Incorporation and Bylaws and certain provisions of Nevada State law could have the effect of making it more difficult or more expensive for a third party to acquire, or from discouraging a third party from attempting to acquire, control of the Company, even when these attempts may be in the best interests of our stockholders. For example, Nevada law provides that approval of a majority of the stockholders is required to remove a director, which may make it more difficult for a third party to gain control of the Company. This concentration of ownership limits the power to exercise control by the minority shareholders.

Compliance with the reporting requirements of federal securities laws can be expensive.

When we become a public reporting company in the United States, we will be subject to the information and reporting requirements of the Exchange Act and other federal securities laws, and the compliance obligations of the Sarbanes-Oxley Act. The costs of preparing and filing annual and quarterly reports and other information with the SEC and furnishing audited reports to stockholders are substantial. In addition, we will incur substantial expenses in connection with the preparation of registration statements and related documents with respect to the registration of resale of the Common Stock.

Applicable regulatory requirements, including those contained in and issued under the Sarbanes-Oxley Act, may make it difficult for us to retain or attract qualified officers and directors, which could adversely affect the management of its business and its ability to obtain or retain listing of our Common Stock.

We may be unable to attract and retain those qualified officers, directors and members of board committees required to provide for effective management because of the rules and regulations that govern publicly held companies, including, but not limited to, certifications required by principal executive officers. The enactment of the Sarbanes-Oxley Act has resulted in the issuance of a series of related rules and regulations and the strengthening of existing rules and regulations by the SEC, as well as the adoption of new and more stringent rules by the stock exchanges. The perceived increased personal risk associated with these changes may deter qualified individuals from accepting roles as directors and executive officers.

Further, some of these changes heighten the requirements for board or committee membership, particularly with respect to an individual's independence from the corporation and level of experience in finance and accounting matters. We may have difficulty attracting and retaining directors with the requisite qualifications. If we are unable to attract and retain qualified officers and directors, the management of our business and our ability to obtain or retain listing of our shares of Common Stock on any stock exchange (assuming we elect to seek and are successful in obtaining such listing) could be adversely affected.

If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or detect fraud. Investors could lose confidence in our financial reporting and this may decrease the trading price of our Common Stock.

We must maintain effective internal controls to provide reliable financial reports and detect fraud. We have been assessing our internal controls to identify areas that need improvement. Failure to maintain an effective system of internal controls could harm our operating results and cause investors to lose confidence in our reported financial information. Any such loss of confidence would have a negative effect on the trading price of our Common Stock.

The price of our Common Stock may become volatile, which could lead to losses by investors and costly securities litigation.

The trading price of our Common Stock may be highly volatile and could fluctuate in response to factors such as:

- actual or anticipated variations in our operating results;
- announcements of developments by us or our competitors;
- the timing of IND and/or NDA approval, the completion and/or results of our clinical trials;
- regulatory actions regarding our products;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- adoption of new accounting standards affecting the our industry;
- additions or departures of key personnel;
- introduction of new products by us or our competitors;
- sales of the our Common Stock or other securities in the open market; and
- other events or factors, many of which are beyond our control.

The stock market is subject to significant price and volume fluctuations. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been initiated against such a company. Litigation initiated against us, whether or not successful, could result in substantial costs and diversion of our management's attention and Company resources, which could harm our business and financial condition.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information and financial data discussed below is derived from the audited consolidated financial statements of Actinium for its fiscal years ended December 31, 2011 and 2010, and the unaudited consolidated financial statements of Actinium for its nine month periods ended September 30, 2012 and 2011. The consolidated financial statements of Actinium were prepared and presented in accordance with generally accepted accounting principles in the United States. The information and financial data discussed below is only a summary and should be read in conjunction with the historical financial statements and related notes of Actinium contained elsewhere in this Report. The financial statements contained elsewhere in this Report fully represent Actinium's financial condition and operations; however, they are not indicative of the Company's future performance. See "Cautionary Note Regarding Forward Looking Statements" above for a discussion of forward-looking statements and the significance of such statements in the context of this Report.

This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. Actual results may differ materially from those discussed in these forward-looking statements due to a number of factors, including those set forth in the section entitled "**Risk Factors**" and elsewhere herein.

Overview

We develop drugs for treatment of cancer with intent to cure or significantly improve survival of the affected patients. As of now none of our drugs have been approved for sale in the United States or elsewhere. We have no commercial operations in sales or marketing of our products. All our product candidates are under development. In order to market and sell our products we must conduct clinical trials on patients and obtain regulatory approvals from appropriate regulatory agencies like the Food and Drug Administration (FDA) in the United States and similar agencies elsewhere in the world.

Our products under development are monoclonal antibodies labeled with radioisotopes. We have one program with an antibody labeled with a beta emitter and several programs based on a proprietary patent protected platform technology called alpha particle immunotherapy or APIT. Our APIT technology is based on attaching actinium 225 (Ac-225) or bismuth 213 (Bi-213) alpha emitting radioisotopes to monoclonal antibodies. Alpha emitting radioisotopes are unstable chemical elements that decay by releasing alpha particles. Alpha particles can kill any cell in whose immediate proximity they are released. Monoclonal antibodies are genetically engineered proteins that target specifically certain cells, and can target cancer cells. It is crucial for the success of our drug candidates to contain monoclonal antibodies that can successfully seek cancer cells and can kill them with the attached isotope while not harming nearby normal cells. We do not have technology and operational capabilities to develop and manufacture such monoclonal antibodies and we therefore rely on collaboration with third parties to gain access to such monoclonal antibodies. We have secured rights to two monoclonal antibodies, HuM195 (Lintuzumab), in 2003 through a collaborative licensing agreement with Abbott Laboratories and BC8 in 2012 with the Fred Hutchinson Cancer Research Center. We expect to negotiate collaborative agreements with other potential partners that would provide us with access to additional monoclonal antibodies. Establishing and maintaining such collaborative agreements is a key to our success as a company.

Under our own sponsorship as well as activity at FHCRC, we have four product candidates in active clinical trials: Actimab™-A (HuM195-Ac-225), Iomab™-B (BC8-I-131), BC8-Y-90 and BC8-SA. At this time, the Company is actively pursuing development of Actimab™-A and Iomab™-B while BC8-Y-90 and BC8-SA are in physician sponsored clinical phase I trials at the Fred Hutchinson Cancer Research Center.

Actimab™-A is a combination of the monoclonal antibody we have in-licensed, Lintuzumab (HuM195), and the alpha emitting isotope actinium 225. Actimab™-A has shown promising results throughout preclinical development and an ongoing clinical trial started in 2006 in treating acute myeloid leukemia (AML) in the elderly. We have expanded the number of patients and number of clinical centers by commencing a new AML clinical trial which we have launched in 2012. This trial targets newly diagnosed AML patients over the age of 60. In order to conduct the trial we are engaged in funding, monitoring and quality assurance and control of the Lintuzumab antibody; procurement of actinium 225 isotope; funding, monitoring and quality assurance and control of the drug candidate Actimab™-A manufacturing and organizing and monitoring clinical trials. We estimate that the direct costs to completion of both parts of the ongoing Phase I/II trial will be approximately US $7 million.

Iomab™-B is a combination of the in-licensed monoclonal antibody BC8 and the beta emitting radioisotope iodine 131. This construct has been extensively tested in Phase I and Phase II clinical trials in approximately 250 patients with different blood cancer indications who were in need of a hematopoietic stem cell transplantation (HSCT). Iomab™-B is used to condition the bone marrow of these patients by destroying blood cancer cells in their bone marrow and elsewhere thus allowing for a subsequent transplant containing healthy donor bone marrow stem cells. We have decided to develop this drug candidate by initially focusing on the patients over 50 with active acute myeloid leukemia in relapse and/or refractory to existing treatments. Our intention is to request the FDA in 2013 to allow us to enter into a pivotal trial with Iomab™-B. We estimate the direct costs of such a trial to completion anticipated in 2015 will be approximately US $15-20 million.

We have primarily management position employees and consultants who direct, organize and monitor the activities described above through contractors. Much of the *in vivo* laboratory and clinical work contracted for by the Company has been conducted at Memorial Sloan-Kettering Cancer Center in New York. The Company has also made clinical trial arrangements with other well known cancer centers.

Our Actimab™-A drug candidate and its components are contract manufactured and maintained under our supervision by specialized contract manufacturers and suppliers in the U.S., including IsoTex Diagnostics, Oak Ridge National Laboratory, Pacific GMP, Fischer Bioservices, BioReliance and others.

The Company was established in 1993 in the Netherlands under the name of "Alphamedical Holding B.V." and the Company was subsequently re-incorporated in Delaware in September 2000 as "Actinium Pharmaceuticals, Inc.".

We are a development stage company and have never generated revenue. Currently we do not have a stable recurring source of revenues sufficient to cover our operating costs. As of December 31, 2011, we had an accumulated deficit of $47.4 million. We incurred net losses of $3.4 million, $0.5 million, $3.4 million, $5.6 million and $5.6 million in the years ending December 31, 2011, 2010, 2009, 2008 and 2007, respectively.

Opportunities, Challenges and Risks

The market for drugs for cancer treatment is a large market in need of novel products, in which successful products can command multibillion dollars in annual sales. A number of large pharmaceutical and biotechnology company regularly acquire products in development, with preference given to products in Phase II or later clinical trials. These deals are typically structured to include an upfront payment that ranges from several million dollars to tens of million dollars or more and additional milestone payments tied to regulatory submissions and approvals and sales milestones. Our goal is to develop our product candidates through Phase II clinical trials and enter into partnership agreements with one or more large pharmaceutical and/or biotechnology companies.

We believe our future success will be heavily dependent upon our ability to successfully conduct clinical trials and preclinical development of our drug candidates. This will in turn depend on our ability to continue our collaboration with Memorial Sloan-Kettering Cancer Center and our Clinical Advisory Board members plan to continue and expand other research and clinical trial collaborations. In addition, we will have to maintain sufficient supply of actinium 225 and successfully maintain and if and when needed replenish or obtain our reserves of monoclonal antibodies. We will have to maintain and improve manufacturing procedures we have developed for production of our drug candidates from the components that include the iodine 131 and actinium 225 isotopes, monoclonal antibodies and other materials. It is possible that despite our best efforts our clinical trials results may not meet regulatory requirements for approval. If our efforts are successful, we will be able to partner our development stage products on commercially favorable terms only if they enjoy appropriate patent coverage and/or considerable know-how and other protection that ensures market exclusivity. For that reason we intend to continue our efforts to maintain existing and generate new intellectual property. Intellectual property is a key factor in the success of our business as well as market exclusivity.

To achieve the goals discussed above we intend to continue to invest in research and development at high and constantly increasing rates thus incurring further losses until one or more of our products are sufficiently developed to partner them to large pharmaceutical and biotechnology companies.

Results of Operations

Nine Months Ended September 30, 2012 Compared to Nine Months Ended September 30, 2011

The following table sets forth, for the periods indicated, data derived from our statements of operations:

	For the Nine Months Ended September 30,		
	2012	2011	Change
Revenues	$ -	$ -	$ -
Operating expenses:			
Research and development, net	2,723,459	231,640	2,491,819
General and administrative	1,520,221	376,748	1,143,473
Depreciation and amortization	429	477	(48)
Total operating expenses	4,244,109	608,865	3,635,244
Loss from operations	(4,244,109)	(608,865)	(3,635,244)
Other (income) expense:			
Interest expense	952,241	-	952,241
Change in fair value of derivative liabilities	287,604	-	287,604
Total other (income) expense	1,239,845	-	1,239,845
Net loss	$ (5,483,954)	$ (608,865)	$ (4,875,089)

Revenues

We recorded no commercial revenues for the nine months ended September 30, 2012 and 2011.

Research and Development Expense

Research and development expenses increased by to $2,491,819 to $2,723,459 for the nine months ended September 30, 2012 compared to $231,640 for the nine months ended September 30, 2011. The increase is attributable to the costs incurred on initiation of the multi-center clinical trial for Actimab™-A. The Company also made its first milestone payment of $750,000 to Abbott Biotherapeutics Corp. upon reaching the milestone. The increase also reflected in an agreement the Company made with MSKCC as of April 2010, in which MSKCC agreed to pay or reimburse the Company for certain costs and expenses related to the Company's drug development and clinical study program. This agreement expired on October 5, 2011. No reimbursement was due for the nine months ended September 30, 2012 and $966,341 was due with respect to the nine months ended September 30, 2011.

General and Administrative Expenses

Overall, total general and administrative expenses increased by $1,143,473 to $1,520,221 for the nine months ended September 30, 2012 compared to $376,748 for the nine months ended September 30, 2011. The increase was largely attributable to increases in professional fees and the stock-based compensation incurred by the Company as discussed below.

In connection with the offering of the Series E Preferred Stock, in January 2012, we issued warrants to purchase 400,013 shares (pre-Actinium Share exchange) of common stock to the transaction manager for consulting services related to assisting the Company in preparing to become a publicly traded company. The fair value of $144,501, or $0.36 per share, was a noncash charge to general and administrative expenses for the nine months ended September 30, 2012.

In February 2012, the Company granted options to purchase 2,125,000 shares of common stock to its employees and consultants with a fair value of $531,913. In July 2012, the Company granted options to purchase 90,000 shares of common stock to its consultants with a fair value of $23,700. In August 2012, the Company granted options to purchase 2,875,000 shares of common stock to its employees and consultants with a fair value of $724,784. For the nine months ended September 30, 2012, the Company recorded amortization of stock-based compensation of $312,500 as a noncash charge to general and administrative expenses.

The increase can also be attributed to additional professional fees of $555,782 related to the year-end audit, the quarterly review, legal fees, and management fees associated with the Company going public. In addition to the professional fees incurred, we increased our personnel. As such, payroll-related expenses for the nine months ended September 30, 2012 increased compared to the same period in 2011.

Interest Expense

Interest expense increased by $952,241 for the nine months ended September 30, 2012 compared to the nine months ended September 30, 2011. The increase in interest expense is directly attributable to interest accrued on the convertible debt, amortization of the convertible debt discount and deferred financing costs related to the convertible debt.

Net Loss

Net loss increased by $4,875,089 to $5,483,954 for the nine months ended September 30, 2012 compared $608,865 for to the nine months ended September 30, 2011. The increase was primarily due to additional costs incurred by the Company in research and development expenses, noncash stock-based compensation costs and professional fees as discussed above.

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

The following table sets forth, for the periods indicated, data derived from our statements of operations:

	For the Years Ended December 31,		
	2011	2010	Change
Revenues	$ -	$ -	$ -
Operating expenses:			
Research and development, net	323,788	93,117	230,671
General and administrative	2,959,246	561,970	2,397,276
Depreciation and amortization	633	72,101	(71,468)
Total operating expenses	3,283,667	727,188	2,556,479
Loss from operations	(3,283,667)	(727,188)	(2,556,479)
Other (income) expense:			
Interest expense	175,094	78	175,016
Gain on extinguishment of liabilities	-	(260,000)	260,000
Change in fair value of derivative liabilities	(13,966)	-	(13,966)
Total other (income) expense	161,128	(259,922)	421,050
Net loss	$ (3,444,795)	$ (467,266)	$ (2,977,529)

Revenues

We recorded no commercial revenues for the years ended December 31, 2011 and 2010.

Research and Development Expense

Research and development expenses increased by $230,671 to $323,788 for the year ended December 31, 2011 compared to $93,117 for the year ended December 31, 2010. The increase is directly attributable to the initiation of the multi-center trial for Actimab™-A.

General and Administrative Expenses

Overall, general and administrative expenses increased by $2,397,276 to $2,959,246 for the year ended December 31, 2011 compared to $561,970 for the year ended December 31, 2010. The increase was largely attributable to increases in professional fees and the stock-based compensation incurred by the Company as discussed below.

In connection with the offering of the Series E Preferred Stock, we issued warrants to purchase 930,272 shares (pre-Actinium share exchange) of common stock to the transaction manager for consulting services related to preparing the Company to become a publically traded company. The fair value of $2,153,442, was a noncash charge to general and administrative expenses for the year ended December 31, 2011.

The increase can also be attributed to additional professional fees of $121,774 related to the management fees incurred associated with the Company going public.

Interest Expense

Interest expense was $175,094 for the year ended December 31, 2011 compared to $78 for the same period of 2010, an increase of $175,016. The increase in interest expense is directly attributable to interest accrued on the convertible debt, amortization of the convertible debt discount and deferred financing costs related to the convertible debt.

Net Loss

Net loss increased by $2,977,529 to $3,444,795 for the year ended December 31, 2011 compared to $467,266 for the year ended December 31, 2010. The increase was primarily due to additional costs incurred by the Company in research and development expenses, noncash stock-based compensation costs and professional fees as discussed above.

Liquidity and Capital Resources

We have financed our operations primarily through sales of the Company's Common Stock and Preferred Stock and the issuance of Convertible Promissory Notes.

We did not have any cash or cash equivalents held in financial institutions located outside of the United States as of September 30, 2012 and December 31, 2011. We do not anticipate this practice will change in the future.

The following tables sets forth selected cash flow information for the periods indicated:

	For the Nine Months Ended September 30,	
	2012	2011
Cash provided by (used in) operating activities	$ (3,795,480)	$ 31,215
Cash provided by (used in) investing activities	(1,812)	-
Cash provided by (used in) financing activities	660,163	-
Net increase (decrease) in cash	$ (3,137,129)	$ 31,215

	For the Years Ended December 31,	
	2011	2010
Cash provided by (used in) operating activities	$ (517,592)	$ (609,740)
Cash provided by (used in) investing activities	-	-
Cash provided by (used in) financing activities	6,025,255	-
Net increase (decrease) in cash	$ 5,507,663	$ (609,740)

Nine Months Ended September 30, 2012 Compared to Nine Months Ended September 30, 2011

Cash and cash equivalents as of September 30, 2012 were $2,566,669.

Net cash used in operating activities was $3,795,480 for the nine months ended September 30, 2012 compared to $31,215 provided by operations for the same period in 2011. Cash used in operations increased due to the increase in spending related to preparations and eventual launch and conduct of a multicenter trial and an increase in spending related to professional fees combined with an increase in payroll-related expenses. Cash provided by operating activities for the nine months ended September 30, 2011 came from the R&D reimbursements received by the Company under the agreement with MSKCC.

Net cash provided by financing activities was $660,163 for the nine months ended September 30, 2012 compared to $0 for the same period in 2011. In January 2012, we sold 2,909,187 shares of Series E Preferred Stock at $0.26 per share. We raised funds through sale of the Company's preferred stock to finance the expansion of our research and development efforts.

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

Cash and cash equivalents as of December 31, 2011 were $5,703,798 compared to $196,135 as of December 31, 2010. The increase in cash was mainly due to proceeds from sale of Series E Preferred Stock, net of offering costs and 8% Senior Subordinated Unsecured Convertible Promissory Notes.

Net cash used in operating activities was $517,592 for the year ended December 31, 2011 compared to $609,740 for the year ended December 31, 2010. Cash used in the operation activities is primarily the result of the costs the Company incurred on research and development activities, net of reimbursements received from MSKCC.

Net cash provided by financing activities was $6,025,255 for the year ended December 31, 2011 compared to $0 for the year ended December 31, 2010. In 2011, we sold 23,697,119 shares of Series E Preferred Stock at $0.26 per share and raised $750,000 through a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes. We raised funds through sale of the Company's preferred stock and the convertible notes in order to finance the expansion of our research and development activities and the costs associated the preparation for becoming a publicly traded company.

We have experienced cumulative losses of approximately $52,672,612 from inception (September 13, 2000) through September 30, 2012, and have a stockholders' deficit of $3,820,812. In addition, the Company has not completed its efforts to establish a stable recurring source of revenues sufficient to cover its operating costs for the next twelve months. These factors raise substantial doubt regarding the Company's ability to continue as a going concern.

Recent Debt and Equity Offerings

During 2011, the Company raised $6,184,967 through an offering of 23,697,119 shares (pre-Actinium share exchange) of the 2011 Series E preferred shares and 5,924,285 warrants (pre-Actinium share exchange). A net amount of $5,379,367 was received by the Company in 2011. Pursuant to the agreement, the Company paid Laidlaw & Company (UK) Ltd. ("Laidlaw & Co."), the placement agent, total cash fees of $742,196, which consisted of placement agent commission of $618,497 and expense reimbursement of $123,699. In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $60,904 for its services as the placement agent's legal counsel and Signature Bank $2,500 for the bank escrow fee.

On December 27, 2011, the Company completed a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes ("Convertible Notes") in the amount of $900,000 and received net proceeds of $750,000. The convertible notes were issued at 83.33% of the principal amount resulting in an original issue discount of $150,000.The Convertible Notes mature one year from the date of issuance. Interest accrues at the rate of 8% per year on the outstanding principal amount, accrued semi-annually and to be paid at maturity.

In January 2012, the Company raised $759,300 through its final offering of the 2011 Series E preferred shares. A net amount of $660,163 was received by the Company. Pursuant to the agreement, the Company paid Laidlaw & Company (UK) Ltd. ("Laidlaw & Co."), the placement agent, total cash fees of $99,137, which consisted of placement agent commission of $91,116 and expense reimbursement of $8,021.

Actinium intends to increase funds available to continue our research and development efforts, which include material supply, manufacturing, clinical development and pre-clinical trials and working capital. In 2013, we expect cash needs of up to $20,000,000 to finance research and development, which include material supply, manufacturing, clinical trials and pre-clinical trials and to cover our ongoing working capital needs. If all of the securities offered hereunder are sold, we believe that the net proceeds from this offering will provide us with the capital needed for these plans.

In the event we do not meet our cash needs of $20,000,000, it may be necessary for us to delay the timing of various product development efforts and focus on our ongoing clinical trial with Actimab™-A.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Seasonality

We do not have a seasonal business cycle. Our revenues and operating results are generally derived evenly throughout the calendar year.

Critical Accounting Policies

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States. To prepare these financial statements, we must make estimates and assumptions that affect the reported amounts of assets and liabilities. These estimates also affect our expenses. Judgments must also be made about the disclosure of contingent liabilities. Actual results could be significantly different from these estimates. We believe that the following discussion addresses the accounting policies that are necessary to understand and evaluate our reported financial results.

Derivatives

All derivatives are recorded at fair value and recorded on the balance sheet. Fair values for securities traded in the open market and derivatives are based on quoted market prices. Where market prices are not readily available, fair values are determined using market based pricing models incorporating readily observable market data and requiring judgment and estimates.

Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. A fair value hierarchy has been established for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

- Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

- Level 2 Inputs – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

- Level 3 Inputs – Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

Income Taxes

The Company uses the asset and liability method in accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and income tax carrying amounts of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company reviews deferred tax assets for a valuation allowance based upon whether it is more likely than not that the deferred tax asset will be fully realized. A valuation allowance, if necessary, is provided against deferred tax assets, based upon management's assessment as to their realization.

Grant Proceeds

The Company received a grant on qualified therapeutic discovery project from the U.S Internal Revenue Service pursuant to the Protection and Affordable Care Credit. The grant was recorded by the Company as a reduction of R&D costs.

Research and Development Costs

Research and development costs are expensed as incurred.

Share-Based Payments

The Company estimates the fair value of each stock option award at the grant date by using the Black-Scholes option pricing model and common shares based on the last common stock valuation done by third party valuation expert of the Company's common stock on the date of the share grant. The fair value determined represents the cost for the award and is recognized over the vesting period during which an employee is required to provide service in exchange for the award. As share-based compensation expense is recognized based on awards ultimately expected to vest, the Company reduces the expense for estimated forfeitures based on historical forfeiture rates. Previously recognized compensation costs may be adjusted to reflect the actual forfeiture rate for the entire award at the end of the vesting period. Excess tax benefits, if any, are recognized as an addition to paid-in capital.

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board (the "FASB") provided amendments to achieve common fair value measurement and disclosure requirements in U.S. GAAP and IFRS. The amendments provide clarification and/or additional requirements relating to the following: (a) application of the highest and best use and valuation premise concepts, (b) measurement of the fair value of instruments classified in an entity's shareholders' equity, (c) measurement of the fair value of financial instruments that are managed within a portfolio, (d) application of premiums and discounts in a fair value measurement, and (e) disclosures about fair value measurements. These amendments will be effective prospectively for interim and annual periods beginning after December 15, 2011. The Company does not expect the adoption of the amendments to have a material impact on its financial position, results of operations or cash flows.

In September 2011, the FASB provided amendments requiring an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a singular continuous statement of comprehensive income or in two separate but continuous statements, eliminating the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. Additionally, the amendments require an entity to present reclassification adjustments on the face of the financial statements from other comprehensive income to net income. These amendments will be effective retrospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company does not expect the adoption of the amendments to have a material impact on its financial position, results of operations, or cash flows, but will require the Company to present the statements of comprehensive income separately from its statements of equity, as these are currently presented on a combined basis.

In December 2011, the FASB issued amended guidance to ASC 210, " *Balance Sheet*", with respect to disclosure of offsetting assets and liabilities as part of the effort to establish common requirements in accordance with U.S. GAAP and IFRS. This amended guidance requires the disclosure of both gross information and net information about both financial statements and derivative instruments eligible for offset in the Company's balance sheet and instruments and transactions subject to an agreement similar to a master netting arrangements. This guidance is effective for periods beginning on or after January 1, 2012, with respective disclosures required retrospectively for all comparative periods presented. The adoption of this guidance effective January 1, 2012 is not expected to have a material effect on the Company's financial statements.

There were various accounting standards and interpretations issued during 2012 and 2011, none of which are expected to have a material impact on the Company's financial position, operations or cash flows.

DESCRIPTION OF PROPERTY

The Company does not own any property. The Company has a short-term lease of its office space at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 through January 31, 2013. Thereafter, it becomes a month to month agreement. The Company pays $4,376 monthly.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows the beneficial ownership of our Common Stock as of December 28, 2012 held by (i) each person known to us to be the beneficial owner of more than five percent (5%) of our Common and Preferred Stock; (ii) each director; (iii) each executive officer; and (iv) all directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and generally includes voting power and/or investment power with respect to the securities held. Shares of Common Stock subject to options and warrants currently exercisable or which may become exercisable within 60 days of December 28, 2012, are deemed outstanding and beneficially owned by the person holding such options or warrants for purposes of computing the number of shares and percentage beneficially owned by such person, but are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person. Except as indicated in the footnotes to this table, the persons or entities named have sole voting and investment power with respect to all shares of our Common Stock shown as beneficially owned by them.

The percentages below are based on fully diluted shares of our Common Stock equivalents, assuming a 100% share exchange by Actinium shareholders, as of December 28, 2012. Unless otherwise indicated, the principal address of each of the persons below is c/o Actinium Pharmaceuticals, Inc., 501 Fifth Avenue, New York, NY 10017.

Executive Officers and Directors	**Number of Shares of Common Stock and Preferred Stock Beneficially Owned**	**Percentage of Ownership(a)**
Jack V. Talley	0(1)	0.0%
Dragan Cicic, MD	163,037(2)	0.8%
Enza Guagenti	2,248(3)	0.0%
Rosemary Mazanet	48,285(4)	0.2%
David Nicholson	3,996(5)	0.0%
Sandesh Seth	164,365(6)	0.8%
Sergio Traversa	0(7)	0.0%
All Directors and Officers as a Group (7 persons)	**381,931**	**1.8%**
All other 5% holders		
Actinium Holdings, Ltd. (8)	5,697,504	21.4%

c/o Michael B. Sheffery
767 Third Avenue
30th Floor
New York, NY 10017

(a) Based on 21,262,367 shares of Common Stock outstanding as of December 20, 2012.

(1) Options granted to purchase an aggregate of 699,300 shares of Common Stock of the Company at an exercise price of $0.784 per share. All shares are subject to vesting. No shares of Common Stock have vested as of December 20, 2012.

(2) Options granted to purchase an aggregate of 414,785 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 99,900 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 163,037 shares of Common Stock have vested as of December 20, 2012.

(3) Options granted to purchase an aggregate of 33,300 shares of Common Stock of the Company at an exercise price of $0.784 per share. All shares are subject to vesting. 2,248 shares of Common Stock have vested as of December 20, 2012.

(4) Options granted to purchase an aggregate of 83,250 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 48,285 shares of Common Stock have vested as of December 20, 2012.

(5) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 3,996 shares of Common Stock have vested as of December 20, 2012.

(6) Warrants to purchase an aggregate of 64,747 shares of Common Stock of the Company at an exercise price of $0.784 per share, exercisable on a cashless basis and warrants to purchase an aggregate of 99,618 of Common Stock of the Company at an exercise price of $0.784 per share, exercisable on a cashless basis issued to Amrosan, LLC, a partnership in which the majority member interest is owned by the family of Mr. Seth. Excludes warrants to purchase an aggregate of 373,442 shares of Common Stock of the Company at par value per share, exercisable on a cashless basis issued to Amrosan, LLC as the warrants are not exercisable upon less than 90 days notice. The holder may waive the 90 day exercise notice requirement by giving 65 days prior notice of such waiver. The shares available by exercise of this Warrant are also restricted and may not be sold or otherwise transferred until the earlier of twelve months from the closing date of the going public transaction; or for six months after the planned Registration Statement is declared effective. Excludes 351,035 warrants issued to Carnegie Hill Asset Partners and irrevocable trust linked to Mr. Seth's family whose terms are the same as those issued to Amrosan, LLC. Also excludes warrants held by the Placement Agent or its affiliates in connection with the Offering, the Bridge Notes Financing, the Series E financing and by designees of Jamess Capital Group, LLC in connection with the going public transaction. Also excludes options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. No shares of Common Stock have vested as of December 20, 2012.

(7) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. No shares of Common Stock have vested as of December 20, 2012.

(8) Mr. Sheffery, a partner of Orbimed Advisors LLC, is the President and director of Actinium Holdings Ltd. (AHL). AHL is wholly-owned by AHLB Holdings, LLC (AHLB), which is, in turn, wholly-owned by MSKCC. Accordingly, such parties may be deemed to share beneficial ownership of the Common Stock of the Company held by AHL. Investment power with respect to the shares of the Company held by AHL is limited pursuant to a letter agreement, dated December 31, 2012, between MSKCC and Laidlaw. The letter agreement provides that the shares of Common Stock held by AHL may not be transferred, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until, in general, the earlier of (i) twelve (12) months from the Closing Date; or (ii) six (6) months following the effective date of the Registration Statement. AHL has certain registration rights with respect to its shares; however, such rights are, in certain respects subordinate to those of investors in certain recent private placements.

DIRECTORS AND EXECUTIVE OFFICERS

Effective following the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act Diane S. Button has resigned from her position as member of the Board of Directors of the Company. Effective upon the closing of the Share Exchange, Diane S. Button resigned as an officer of the Company. Also effective upon the closing of the Share Exchange, Jack V. Talley was appointed to our Board of Directors. Effective as of the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act Dr. Rosemary Mazanet, David Nicholson, Sandesh Seth and Sergio Traversa were appointed to our Board of Directors. In addition, our Board of Directors appointed Jack V. Talley to serve as our President and Chief Executive Officer, Dragan Cicic to serve as our Chief Operating Officer and Chief Medical Officer, and Enza Guagenti to serve as our Chief Financial Officer, effective immediately upon the closing of the Share Exchange.

The following sets forth information about our directors and executive officers as of the closing of the Share Exchange and following the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act:

Name	Age	Position
Jack V. Talley	56	Chief Executive Officer, President, and Director
Dragan Cicic, MD	49	Chief Operating Officer and Chief Medical Officer
Enza Guagenti, CPA	50	Chief Financial Officer
Rosemary Mazanet, MD, PhD	57	Director
David Nicholson, PhD	58	Director
Sandesh Seth, MS, MBA	48	Director
Sergio Traversa, MBA	52	Director

Jack V. Talley, Chief Executive Officer, President and Director

Jack V. Talley is the CEO, President and a Director of Actinium Pharmaceuticals, Inc. (API). Mr. Talley recently joined API from the position of President, Chief Executive Officer and a Director at EpiCept Corporation. Mr. Talley has more than 30 years of experience in the pharmaceutical industry. Prior to EpiCept, Mr. Talley was the Chief Executive Officer of Consensus Pharmaceuticals, Inc., a biotechnology drug discovery start-up company that developed a proprietary peptide-based combinatorial library screening process. Prior to joining Consensus, Mr. Talley led Penwest Ltd.'s efforts in its spin-off of its subsidiary Penwest Pharmaceuticals Co. in 1998 and served as President and Chief Operating Officer of Penwest Pharmaceuticals. Mr. Talley started his career at Sterling Drug Inc., where he was responsible for all U.S. marketing activities for prescription drugs, helped launch various new pharmaceutical products and participated in the 1988 acquisition of Sterling Drug by Eastman Kodak Co. Mr. Talley received his B.S. in Chemistry from the University of Connecticut and completed coursework towards an M.B.A. in Marketing from New York University, Graduate School of Business.

Dragan Cicic, MD, MBA, Chief Operating Officer and Chief Medical Officer

Dragan Cicic is the COO and CMO of Actinium Pharmaceuticals, Inc. (API). He joined the company in 2005 and previously held the position of the CEO and prior to that of the Medical Director at API. Dr. Cicic joined API from the position of Project Director of QED Technologies Inc., a life sciences strategic consulting and transactional group focused on emerging biotech, pharmaceuticals and medical devices companies. Dr. Cicic prepared business and strategic plans on behalf of those clients and assisted them in raising funding. He also represented corporate and private investors in identifying acquisition and/or investment targets and negotiating, structuring and consummating deals. Prior to joining QED Technologies, Dr. Cicic was an investment banker with SG Cowen Securities.

Dr. Cicic graduated as a Medical Doctor from the School of Medicine at The Belgrade University, and received his MBA from Wharton School at The University of Pennsylvania. He was also a Nieman Fellow at Harvard University.

Enza Guagenti, CPA, Chief Financial Officer

Enza Guagenti, CPA, is the CFO of Actinium Pharmaceuticals, Inc. (API). Ms. Guagenti has over 25 years of experience in health care management and accounting. Prior to becoming the CFO, Ms. Guagenti worked for API as the corporate accounting consultant for eight years. Ms. Guagenti held a senior management level position as Administrator for of an out-patient medical facility that services approximately 8,000 patients per year. She was responsible for all aspects of operations, which included financial oversight and reporting and maintaining regulatory compliance as mandated by CMS, NJDHSS and The Joint Commission. Ms. Guagenti implemented a financial reporting structure, financial and clinical benchmarks and processes that enhanced operations, controlled costs and improved patient care. Prior experience also includes serving as corporate controller for one of the largest infertility practices in NJ. As corporate controller, she was responsible for reporting on and consolidating four profit centers.

Ms. Guagenti served as President of the NJ Association of Ambulatory Surgery Center from 2003-2008. She has served on the Legal & Regulatory Committee of Governor Corzine's Commission on Rationing of Healthcare Resources, 2008, and has served on various committees at the NJDHSS.

Ms. Guagenti received her Bachelor of Science in Accounting from Bloomfield College and graduated Magna Cum Laude. She is a Certified Public Accountant licensed in the state of NJ.

Rosemary Mazanet MD, PhD, Director

Rosemary Mazanet is a Director of the Company and a life sciences investment professional and executive with management and drug development experience. She is a Co-Founder and CSO of Apelles Investment Management, LLC, a public and private equity investment firm, focused on healthcare and the CEO of Diabetes America, Inc., the premier network of diabetes care and management centers. Prior to that, Dr. Mazanet was a General Partner, Director of Research and CSO of Oracle Partners, LP, a $1 Billion healthcare hedge fund. Dr. Mazanet has also been the CEO of several life sciences companies, including Breakthrough Therapeutics LLC and Access Pharmaceuticals (OTC: ACCP). She started her career in business as a Sr. Director of Clinical Research with Amgen, Inc.

In addition, Dr. Mazanet is a trustee of the University of Pennsylvania School of Medicine/Hospital and a director with and Cellumen, Inc. She trained in internal medicine at the Brigham and Women's Hospital and in oncology at the Dana Farber Cancer Institute, both part of the Harvard Medical system, where she was a staff physician prior to joining Amgen. Dr. Mazanet holds a B.A. in Biology from the University of Virginia and an M.D. and a Ph.D. from the University of Pennsylvania.

C. David Nicholson, BS, PhD, Director

C. David Nicholson is a Director of the Company and joined the Executive Committee of Bayer CropScience on March 5, 2012 as Head of Research & Development responsible for the integration of the company's R&D activities into one global organization. Dr. Nicholson graduated in pharmacology, earning his B.Sc. from the University of Manchester (1975) and his Ph.D. from the University of Wales (1980). Between 1978 and 1988, Dr. Nicholson worked in the pharmaceutical industry for the British company Beecham-Wülfing in Gronau, Germany. The main emphasis of his activities as group leader in a multidisciplinary project group was the development of cardiovascular drugs.

From 1988-2007, Dr, Nicholson held various positions of increasing seniority in the UK, the Netherlands and the USA with Organon a Business Unit of Akzo Nobel. Ultimately he became Executive Vice President, Research & Development, and member of the Organon Executive Management Committee. He implemented change programs, leading to maximizing effectiveness in research & development, ensuring customer focus and the establishment of a competitive pipeline of innovative drugs. In 2007, Dr. Nicholson transferred to Schering-Plough, Kenilworth, New Jersey, USA, as Senior Vice President, responsible for Global Project Management and Drug Safety. From 2009 to December 2011, he was Vice President Licensing and Knowledge Management at Merck in Rahway, New Jersey, USA, reporting to the President of Merck R&D. As an integration team member, David Nicholson played a role in the strategic mergers of Organon BioSciences, the human and animal health business of Dutch chemical giant Akzo-Nobel, and Schering-Plough in 2007 as well as of Schering-Plough and Merck in 2009. C. David Nicholson is presently on the Board of multiple biotechnology companies, including Actinium Pharmaceuticals, Inc.

Sandesh Seth, MS, MBA, Director

Mr. Sandesh Seth is a Director of the Company and the Head of Healthcare Investment Banking at Laidlaw & Company (UK) Ltd. Mr. Seth has over 20 years of experience which includes investment banking at Cowen & Co., equity research at Bear Stearns and Commonwealth Associates and in the pharmaceutical industry at Pfizer, Warner-Lambert, and SmithKline Beecham in strategic planning, business development and R&D project management respectively. Mr. Seth's financial services experience includes 75+ completed transactions in which $5 billion+ in capital was raised. Transactions included venture investments, private placements, IPOs, FOs, PIPEs, Convertible and High-Yield Debt. Mr. Seth was also involved with various strategic initiatives such as mergers and acquisitions, leveraged and management buy-outs, and licensing and joint ventures, including the $100 billion merger of Pfizer and Warner-Lambert and the $20 billion merger of Pharmacia & Upjohn with Monsanto. Mr. Seth has an MBA in Finance from New York University; an M.S. in the Pharmaceutical Sciences from the University of Oklahoma Health Center and a B.Sc. in Chemistry from Bombay University. He has published several scientific articles and was awarded the University Regents Award for Research Excellence at the University of Oklahoma. Mr. Seth was designated as Regulatory Affairs Certified (R.A.C.) by the Regulatory Affairs Professionals Society which signifies proficiency with U.S. FDA regulations. He also holds the following Securities Industry Licenses: Series 7, 79 and 63.

Sergio Traversa, PharmD, MBA, Director

Mr. Traversa is a Director of the Company and the Chief Executive Officer of Relmada Therapeutics Inc. Previously, he was the co-founder and CEO of Medeor Inc. a spinoff pharmaceutical company from Cornell University. Dr. Traversa has over 25 years of experience in the healthcare sector in the United States and Europe, ranging from management positions in the pharmaceutical industry to investing and strategic advisory roles. He has held financial analyst, portfolio management and strategic advisory positions at large U.S. investment firms specializing in healthcare, including Mehta and Isaly and Mehta partners, ING Barings, Merlin BioMed and Rx Capital. Dr. Traversa was a founding partner of Ardana Capital, a pharmaceutical and biotechnology investment advisory firm. In Europe, he held the position of Area Manager for Southern Europe (Italy, Spain, Greece and Portugal) of Therakos Inc., a cancer and immunology division of Johnson & Johnson. Prior to Therakos, Dr. Traversa was at Eli Lilly, where he served as Marketing Manager of the Hospital Business Unit. He was also a member of the CNS team at Eli Lilly, where he participated in the launch of Prozac and the early development of Zyprexa and Cymbalta. Dr. Traversa started his career as a sales representative at Farmitalia Carlo Erba, the largest pharmaceutical company in Italy later sold to Pharmacia and now part of Pfizer. Dr. Traversa holds a Laurea degree in Pharmacy from the University of Turin (Italy) and an MBA in Finance and International Business from the New York University Leonard Stern School of Business.

Corporate Governance

The business and affairs of the Company are managed under the direction of the Board of Directors (the "Board"), which following the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act, will be comprised of Jack V. Talley, Rosemary Mazanet, MD, PhD, David Nicholson, PhD, Sandesh Seth, MS, MBA, and Sergio Traversa, MBA.

Term of Office

Directors are appointed for a one-year term to hold office until the next annual general meeting of stockholders or until removed from office in accordance with our bylaws. Our officers are appointed by our Board and hold office until removed by our Board.

All officers and directors listed above will remain in office until the next annual meeting of our stockholders, and until their successors have been duly elected and qualified. Our bylaws provide that officers are appointed annually by our Board and each executive officer serves at the discretion of our Board.

Director Independence

We use the definition of "independence" of The NASDAQ Stock Market to make this determination. NASDAQ Listing Rule 5605(a)(2) provides that an "independent director" is a person other than an officer or employee of the company or any other individual having a relationship which, in the opinion of the Company's Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The NASDAQ listing rules provide that a director cannot be considered independent if:

- the director is, or at any time during the past three years was, an employee of the company;
- the director or a family member of the director accepted any compensation from the company in excess of $120,000 during any period of 12 consecutive months within the three years preceding the independence determination (subject to certain exclusions, including, among other things, compensation for board or board committee service);
- a family member of the director is, or at any time during the past three years was, an executive officer of the company;
- the director or a family member of the director is a partner in, controlling stockholder of, or an executive officer of an entity to which the company made, or from which the company received, payments in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenue for that year or $200,000, whichever is greater (subject to certain exclusions);
- the director or a family member of the director is employed as an executive officer of an entity where, at any time during the past three years, any of the executive officers of the company served on the compensation committee of such other entity; or
- the director or a family member of the director is a current partner of the company's outside auditor, or at any time during the past three years was a partner or employee of the company's outside auditor, and who worked on the company's audit.

Our Common Stock is not currently quoted or listed on any national exchange or interdealer quotation system with a requirement that a majority of our board of directors be independent and, therefore, the Company is not subject to any director independence requirements. Under the following three NASDAQ director independence rules a director is not considered independent: (a) NASDAQ Rule 5605(a)(2)(A), a director is not considered to be independent if he or she also is an executive officer or employee of the corporation, (b) NASDAQ Rule 5605(a)(2)(B), a director is not consider independent if he or she accepted any compensation from the company in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, and (c) NASDAQ Rule 5605(a)(2)(D), a director is not considered to be independent if he or she is a partner in, or a controlling shareholder or an executive officer of, any organization to which the company made, or from which the company received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenues for that year, or $200,000. Under such definitions, David Nicholson and Sergio Traversa are the only independent directors.

Committees of the Board of Directors

On December __, 2012, our board of directors formed three standing committees: audit, compensation, and corporate governance and nominating. Actions taken by our committees are reported to the full board. Each of our committees has a charter and each charter is posted on our website.

Audit Committee	Compensation of Committee
David Nicholson*	David Nicholson*
Sergio Traversa	Dr. Rosemary Mazanet
Dr. Rosemary Mazanet	Sandesh Seth

***** Indicates committee chair

Audit Committee

Our audit committee, which currently consists of three directors, provides assistance to our board in fulfilling its legal and fiduciary obligations with respect to matters involving the accounting, financial reporting, internal control and compliance functions of the company. Our audit committee employs an independent registered public accounting firm to audit the financial statements of the company and perform other assigned duties. Further, our audit committee provides general oversight with respect to the accounting principles employed in financial reporting and the adequacy of our internal controls. In discharging its responsibilities, our audit committee may rely on the reports, findings and representations of the company's auditors, legal counsel, and responsible officers. Our board has determined that all members of the audit committee are financially literate within the meaning of SEC rules and under the current listing standards of the Nasdaq Capital Market. Our board has also determined that Mr. Nicholson qualifies as an "audit committee financial expert."

Compensation Committee

Our compensation committee, which currently consists of three directors, establishes executive compensation policies consistent with the company's objectives and stockholder interests. Our compensation committee also reviews the performance of our executive officers and establishes, adjusts and awards compensation, including incentive-based compensation, as more fully discussed below. In addition, our compensation committee generally is responsible for:

- establishing and periodically reviewing our compensation philosophy and the adequacy of compensation plans and programs for our directors, executive officers and other employees;
- overseeing our compensation plans, including the establishment of performance goals under the company's incentive compensation arrangements and the review of performance against those goals in determining incentive award payouts;
- overseeing our executive employment contracts, special retirement benefits, severance, change in control arrangements and/or similar plans;
- acting as administrator of any company stock option plans; and
- overseeing the outside consultant, if any, engaged by the compensation committee.

Our compensation committee periodically reviews the compensation paid to our non-employee directors and the principles upon which their compensation is determined. The compensation committee also periodically reports to the board on how our non-employee director compensation practices compare with those of other similarly situated public corporations and, if the compensation committee deems it appropriate, recommends changes to our director compensation practices to our board for approval.

Outside consulting firms retained by our compensation committee and management also will, if requested, provide assistance to the compensation committee in making its compensation-related decisions.

Family Relationships

There are no family relationships among any of our officers or directors.

Involvement in Certain Legal Proceedings

To our knowledge, none of our current directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;
- been found by a court of competent jurisdiction in a civil action or by the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in “Certain Relationships and Related Transactions,” none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

Code of Ethics

The Company has adopted a code of ethics, a copy of which is attached hereto at Exhibit 14.1.

EXECUTIVE COMPENSATION

The following table provides information regarding the compensation earned during the fiscal years ended December 31, 2011 and December 31, 2010 and expected to be earned for the fiscal year ended December 31, 2012 by our Chief Executive Officer and the two next most highly compensated executive officers.

Name/Position	Year	Salary	Bonus	Option Awards	Other Compensation	Total
Jack Talley, CEO	**2012**	**$250,000**	**$0.00**	**$58,412**	**$0.00**	**$308,412**
	2011	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	2010	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Dragan Cicic, COO	**2012**	**$190,658**	**$ 0.00**	**$58,426**	**$0.00**	**$249,084**
	2011	**190,658**	**50,000**	**9,717**	**0.00**	**250,375**
	2010	**190,658**	**0.00**	**9,717**	**0.00**	**200,375**
Enza Guagenti, CFO	**2012**	**$90,000**	**$0.00**	**$3,394**	**$0.00**	**$ 93,394**
	2011	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	2010	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Under the terms of Dr. Cicic's employment contract and the agreed upon written terms of employment for Mr. Talley and Ms Guagenti, these employees are entitled to receive severance of twelve months, twelve months and three months base salary, respectively, upon termination by the Company without cause, or upon resignation within thirty days after a change in job responsibilities and a reduction in base salary.

Director Compensation

Historical non-management Directors of the Company do not receive any cash compensation. Commencing October 1, 2012, non-management Directors of the Company will receive a quarterly cash retainer of $7,500 per calendar quarter for their service on the Board of Directors. They also receive reimbursement for out-of-pocket expenses and certain directors have received stock option grants for shares of Company Common Stock as described in the beneficial ownership table in the section titled "SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT."

Outstanding Equity Awards at Fiscal Year-End Table

At December 31, 2011, Cactus had no outstanding equity awards.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Related Party Transactions

On January 18, 2001, API entered in a Clinical Trial Agreement with Memorial Sloan-Kettering Cancer Center (MSKCC) and Sloan-Kettering Institute of Cancer Research ("SKI"), an [affiliate] of MSKCC. Through an indirect subsidiary, MSKCC is a principal stockholder of the Company. The agreement provided for the conduct by SKI/MSKCC of Phase I/II clinical trials of the use of 213Bi-Hu195and cytarabine for the treatment of acute myeloid leukemia and for API's partial sponsorship of the study in exchange for access to data resulting from the study. API was obligated to pay SKI (a) $10,000 for each completed case report on a completed subject, and (b) $2,500 for each case report on an incomplete subject. The trial enrolled 31 patients, was completed in 2007 and all the money due to Memorial Sloan-Kettering Cancer Center (MSKCC) and Sloan-Kettering Institute of Cancer Research ("SKI") were paid in full.

On February 11, 2002, API entered in a License, Development and Commercialization Agreement with SKI. The agreement was amended in August 2006. Pursuant to the agreement, API licenses certain intellectual property from SKI, including critical patents with respect to API's core technology, and also supports ongoing research and clinical development of API related drug candidates. Certain amounts due under this agreement were deferred and then forgiven under the forbearance-related arrangements described below. On June 19, 2011, API nonetheless agreed to pay SKI (a) $50,000 in 2011, (b) $200,000 in 2012 and (c) $250,000 in 2013 under this agreement, in respect of the $50,000 annual patent maintenance fees and research payments. January 1, 2011, API has paid $50,000 for 2011 and $50,000 for 2012 under this Agreement and as of December 21, 2012, and additional $15, 000 was due from API under this agreement consisting of $50,000 in respect of the 2012 patent maintenance fee, $50,000 of patent expenses $100,000 research and development support.

On February 25, 2006, API entered in a Clinical Trial Agreement with Memorial Sloan-Kettering Cancer Center (MSKCC) and Sloan-Kettering Institute of Cancer Research ("SKI"), a party related to MSKCC. Through an indirect subsidiary, MSKCC is a principal stockholder of the Company. The agreement provides for the conduct by SKI/MSKCC of a Phase I clinical trials of the use of Actinium 225-HuM195 for the treatment of advanced myeloid malignancy and for API's partial sponsorship of the study in exchange for access to data resulting from the study. API is obligated to pay SKI (a) $10,000 for each completed case report on a completed subject, and (b) $2,500 for each case report on an incomplete subject. As of December 21, 2012, 18 subjects had been enrolled in this study, and partners intend to attempt to enroll and additional 3 subjects. The maximum compensation for which API is responsible for and the agreement is $328,000. Since the inception of the trial in 2006, API has paid $180,000 and since January 1, 2011, API has paid $70,000 under the agreement as of December 31, 2012 no money's were do under this agreement.

In April 2010, SKI agreed, on behalf of itself and its related or affiliated entities, including MSKCC, to forbear from collecting or otherwise enforcing API's then outstanding obligations to those entities and similar obligations arising during a defined forbearance period. The initial outstanding obligations consisted of approximately $260,000 due under API's license and clinical trials agreements with those entities. In June 2011, SKI agreed to forgive all current and future obligations subject to the forbearance in order to facilitate API's financing efforts. The forbearance period terminated on October 30, 2011, when the Company satisfied a financing condition to the termination of the forbearance period by raising in excess of $3,000.000 in new equity financing.

In April, 2011, SKI agreed to lend API $215,100 in order to fund current operating expenses and addition essential expenditures due over the ensuing six-month period. As of October 30, 2012, API had repaid $171,000 of such loans; the balance is due in January 2013. The largest aggregate amount of these loans outstanding at any time was $215,100.

MSKCC agreed, subject to certain conditions, to utilize donated funds for certain clinical and preclinical programs and activities related to Actinium's drug development and clinical study programs, including the payment of certain costs and expenses that would otherwise have been borne by Actinium. The following is a summary of activities related to the MSKCC arrangements at December 31, 2011 and 2010:

	2011	2010
Qualified R&D costs incurred by API	$ 655,786	$ 528,319
Cash received from MSKCC	966,341	248,418

As of December 31, 2011 and 2010, the Company had reimbursement receivables for costs incurred of $237,834 and $279,401 from MSKCC, respectively. These amounts have since been paid.

In October 2011, AHL agreed, in connection with API's concurrent private offering, to waive its rights to anti-dilution adjustments in respect of its outstanding preferred stock and its preemptive rights to purchase the Series E Preferred Stock. AHL also agreed to the restructuring of its registration rights in favor of the private placement purchasers and to the amendment of the stockholders agreement of API to permit, among other transactions, the share exchange and to reduce its board representation from two directors to one director. API agreed (i) not to reduce the indemnification, advancement of expenses and similar rights of present and former directors and officers of API, (ii) until April 30, 2016 to maintain directors' and officers' liability insurance at least in the same manner and to the same extent as then in effect, and (iii) following any merger, asset transfer and certain other transactions to provide for the parity of such directors and officers in respect of indemnification, advancement of expenses and d&o insurance with such rights applicable to the non-continuing directors following such transactions.

On March 27, 2012, Actinium entered into an additional clinical trial agreement with Memorial Sloan-Kettering Cancer Center with respect to. Actinium will pay $31,185 for each patient that has completed the clinical trial. Upon execution of the agreement, Actinium is required to pay a start-up fee of $79,623, which was paid on July 10, 2012.

On December 31, 2012, AHL entered into a lock-up letter agreement with Laidlaw providing that the shares of Common Stock of the Company held by AHL may not be transferred, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until , in general, the earlier of (i) twelve (12) months from the Closing Date; or (ii) six (6) months following the effective date of the Registration Statement. AHL has certain registration rights with respect to its shares; however, such rights are, in certain respects, subordinate to those of investors in certain recent private placements.

On January 1, 2012, API entered into a Consulting Services Agreement with Dr. Rosemary Mazanet, a director of Cactus. Pursuant to the agreement, Dr. Mazanet is to provide, among other things, consulting services in the areas of implementation of the Actimab trial including all aspects of study initiation until first patient in at each clinical site. Dr. Mazanet receives compensation of $100,000 per year and may receive additional compensation in the form of options at determined by the board of API. Since January 1, 2011, Dr. Mazanet has received options to purchase 225,000 shares of common stock of API.

Jack Talley, Chief Executive Officer of Cactus, has an agreement pursuant to which he will maintain a 3% equity ownership on a fully diluted basis in Cactus up to the final closing of the Offering. The maximum offering amount with greenshoe option of the Offering is $20,000,000. As of December 28, 2012, a total $5,151,450 has been raised in the Offering.

On August 7, 2012, API entered into an engagement agreement with the Placement Agent, which is affiliated with Mr. Seth, a director of Cactus Ventures, Inc. by virtue of the acquisition transaction of Actinium Pharmaceuticals, Inc. Mr. Seth is Head of Healthcare Investment Banking for the Placement Agent. Pursuant to the agreement, the Placement Agent was engaged as the exclusive agent for the Offering of the Units by API. None of Cactus' current officers or directors had a prior relationship or affiliation with Cactus prior to the closing of the Share Exchange. In consideration for its services, the Placement Agent will receive (a) a cash fee equal to 10% of the gross proceeds raised in the Offering, (b) a non-accountable expense reimbursement equal to 2% of the gross proceeds raised in the Offering, and (c) reimbursement of $100,000 for legal expenses incurred by the Placement Agent. The Placement Agent or its designees have also received warrants to purchase shares of API's Common Stock in an amount equal to 10% of the shares of Common Stock issued as part of the Units sold in the Offering and the shares of Common Stock issuable upon exercise of the B Warrants included in such Units. The Placement Agent will also receive the same fee and expense schedule for any cash exercise of Warrants within 6 months of the final closing of the Offering and a 5% solicitation fee for any Warrants exercised as a result of being called for redemption by the Company. Upon the final closing of the Offering of the Units the Placement Agent has been engaged by API to provide certain financial advisory services to API for a period of at least 6 months for a monthly fee of $25,000. The agreement also provides that (i) if API consummates any merger, acquisition, business combination or other transaction (other than the Share Exchange) with any party introduced to it by the Placement Agent, the Placement Agent would receive a fee equal to 10% of the aggregate consideration in such transactions, and (ii) if, within a period of 12 months after termination of the advisory services described above, API requires a financing or similar advisory transaction the Placement Agent will have the right to act as API's financial advisor and investment banker in such financing or transaction pursuant to a set fee schedule set forth in the August 7, 2012 engagement agreement. For a period ending one year after the expiration of all lock-up agreements entered into in connection with the Share Exchange, any change in the size of the API board of directors must be approved by the Placement Agent. The Placement Agent also was engaged by API as placement agent for its Series E Preferred and notes financing in 2011 and, as a part of the fee for that engagement, designees of the Placement Agent also hold warrants to purchase 1,245,226 shares of API's Common Stock.

On May 9, 2011, API entered into a transaction management agreement with Jamess Capital Group, LLC. (formerly known as Amerasia Capital Group, LLC), a consulting firm affiliated with Mr. Sandesh Seth, a director of the Cactus by virtue of his position as a director of Actinium Pharmaceuticals. Mr. Seth is a Managing Partner of the consulting firm some of whose member interests are held by entities owned by officers and employees of the Placement Agent. None of Cactus' current officers or directors had a prior relationship or affiliation with Cactus prior to the closing of the Share Exchange. Pursuant to the agreement, the management firm was engaged to provide consulting services to API related to the consummation of a going public transaction for API. The management firm received a monthly fee of $12,500 which is terminable by API three months after the effective date of the going public transaction and designees of Jamess, including entities affiliated with Mr. Seth, were issued warrants to purchase common stock equal to 10% of the fully-diluted capital stock of API as of the effective date of the going public transaction. The fully diluted shares for this calculation included all issued and outstanding shares as well as those reserved under the Employee Stock Option Plan. Jamess Capital Group does not retain beneficial ownership of the warrants as they were issued to designess of the members in amounts which do not qualify either Jamess or the warrant holders for inclusion in the beneficial ownership table. The warrants contain a provision wherein the holder may waive the 90 day exercise notice requirement by giving 65 days prior notice of such waiver. The shares available by exercise of this Warrant are also restricted and may not be sold or otherwise transfered until the earlier of twelve months from the closing date of the Pubco Transaction; or for six months after the planned Registration Statement is declared effective. The consulting firm is also eligible to be reimbursed upon the submission of proper documentation for ordinary and necessary out-of-pocket expenses not to exceed $5,000 per month.

In 2010, API entered into an agreement with Guagenti & Associates LLC ("G&A"). G&A is affiliated with Enza Guagenti, the Chief Financial Officer of Cactus. Pursuant to the agreement, API leases storage space in Newark, NJ from G&A. The rent is $300 per month. Since January 1, 2011, API has paid $3,600 pursuant to this agreement.

Non-Competition Agreements

Our executive officers have signed non-competition agreements, which provide that all inventions become the immediate property of API and require invention assignments. The agreements provide that the executive officers will hold proprietary information in the strictest confidence and not use the confidential information for any purpose not expressly authorized by us.

LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings, which arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm business. We are currently not aware of any such legal proceedings or claims that will have, individually or in the aggregate, a material adverse effect on our business, financial condition or operating results.

MARKET PRICE AND DIVIDENDS ON OUR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Market Information

Our common stock is listed on OTCBB, under the symbol "CTVN". However, there is no active market for our Common Stock and trading has been extremely limited. The last quoted price for our Common Stock was $0.10 for a trade on June 1, 2012, as reported on www.otcbb.com. However, as there is currently little to no market for our Common Stock, we believe that this last reported price does not accurately reflect the value of the Common Stock or the Company, and it may not be possible to sell Common Stock at this price.

Holders

As of the Closing Date and after giving effect to the Share Exchange, 4,709,015 shares of Common Stock were issued and outstanding, which were held by 118 holders of record. There are no shares of Preferred Stock outstanding.

Of the 4,709,015 shares of Common Stock issued and outstanding, 4,309,015 of such shares are restricted shares under the Securities Act. None of these restricted shares are eligible for resale absent registration or an exemption from registration under the Securities Act. As of the date hereof, the exemption from registration provided by Rule 144 under the Securities Act is not available for these shares pursuant to Rule 144(i).

Registration Rights

The Subscribers are entitled to certain registration rights, including piggy-back registration rights, with respect to the shares of Common Stock purchased in the Offering.

Dividends

We have never declared or paid a cash dividend. Any future decisions regarding dividends will be made by our Board of Directors. We currently intend to retain and use any future earnings for the development and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Our Board of Directors has complete discretion on whether to pay dividends. Even if our Board of Directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the Board of Directors may deem relevant.

Penny Stock

Our Common Stock is subject to provisions of Section 15(g) and Rule 15g-9 of the Exchange Act, commonly referred to as the "penny stock rule." Section 15(g) sets forth certain requirements for transactions in penny stock, and Rule 15g-9(d) incorporates the definition of "penny stock" that is found in Rule 3a51-1 of the Exchange Act. The SEC generally defines a penny stock to be any equity security that has a market price less than $5.00 per share, subject to certain exceptions. The Company is subject to the SEC's penny stock rules.

Since the Common Stock will be deemed to be penny stock, trading in the shares of our common stock is subject to additional sales practice requirements on broker-dealers who sell penny stock to persons other than established customers and accredited investors. "Accredited investors" are persons with assets in excess of $1,000,000 or annual income exceeding $200,000 or $300,000 together with their spouse. For transactions covered by these rules, broker-dealers must make a special suitability determination for the purchase of such security and must have the purchaser's written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt the rules require the delivery, prior to the first transaction of a risk disclosure document, prepared by the SEC, relating to the penny stock market. A broker-dealer also must disclose the commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements must be sent disclosing recent price information for the penny stocks held in an account and information to the limited market in penny stocks. Consequently, these rules may restrict the ability of broker-dealer to trade and/or maintain a market in our common stock and may affect the ability of the Company's stockholders to sell their shares of common stock.

Securities Authorized for Issuance under Equity Compensation Plans

We do not have in effect any compensation plans under which our equity securities are authorized for issuance. The Company intends to adopt an equity compensation plan in which its directors, officers, employees and consultants shall be eligible to participate. However, no formal steps have been taken as of the date of this Report to adopt such a plan.

RECENT SALES OF UNREGISTERED SECURITIES

Reference is made to the disclosure set forth under Item 3.02 of this Report, which disclosure is incorporated by reference into this section.

DESCRIPTION OF SECURITIES

Introduction

In the discussion that follows, we have summarized selected provisions of our articles of incorporation, bylaws and Nevada law relating to our capital stock. This summary is not complete. This discussion is subject to the relevant provisions of Nevada law and is qualified in its entirety by reference to our articles of incorporation and our bylaws. You should read the provisions of our certificate of incorporation and our bylaws as currently in effect for provisions that may be important to you.

Authorized Capital Stock

The total authorized shares of capital stock of the Company currently consists of 100,000,000 shares of common stock, par value $0.01 per share, and 10,000,000 shares of preferred stock, par value $0.01 per share.

Common Stock

Holders of our common stock are entitled to receive notice of and to attend all meetings of our stockholders, and to one vote for each share on all matters submitted to a stockholder vote. Holders of common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of common stock voting for the election of directors can elect all of the directors. Holders of our common stock representing a majority of the voting power of our capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of our stockholders. A vote by the holders of a majority of our outstanding shares is required to effectuate certain fundamental corporate changes such as liquidation, merger or an amendment to our articles of incorporation.

In the event of liquidation, dissolution or winding up, each outstanding share entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over the common stock. Holders of our common stock have no pre-emptive rights, no conversion rights and there are no redemption provisions applicable to our common stock.

As of December 28, 2012, 4,709,015 shares of common stock are held by 118 stockholders.

Dividends

Holders of common stock are entitled to share in all dividends that the board of directors, in its discretion, declares from legally available funds. We have not paid any cash dividends on our Common Stock and do not plan to pay any such dividends in the foreseeable future. We currently intend to use all available funds to develop our business. We can give no assurances that we will ever have excess funds available to pay dividends.

Preferred Stock

We are authorized to issue up to 10,000,000 shares of preferred stock, par value $0.01 per share, in one or more series as may be determined by our Board of Directors, who may establish, from time to time, the number of shares to be included in each series, may fix the designation, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereof. Any preferred stock so issued by the Board may rank senior to the common stock with respect to the payment of dividends or amounts upon liquidation, dissolution or winding up of us, or both. Moreover, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, under certain circumstances, the issuance of preferred stock or the existence of the unissued preferred stock might tend to discourage or render more difficult a merger or other change of control. We currently do not have any preferred stock outstanding.

Anti-takeover Effects of Our Articles of Incorporation and By-laws

Our Articles of Incorporation and Bylaws contain certain provisions that may have anti-takeover effects, making it more difficult for or preventing a third party from acquiring control of our Company or changing our Board of Directors and management. According to our Bylaws and Articles of Incorporation, neither the holders of our common stock nor the holders of our preferred stock have cumulative voting rights in the election of our directors. The combination of the present ownership by a few stockholders of a significant portion of our issued and outstanding common stock and lack of cumulative voting makes it more difficult for other stockholders to replace our Board of Directors or for a third party to obtain control of our Company by replacing our Board of Directors.

Anti-takeover Effects of Nevada Law

Business Combinations

The “business combination” provisions of Sections 78.411 to 78.444, inclusive, of the Nevada Revised Statutes, or NRS, generally prohibit a Nevada corporation with at least 200 stockholders of record, a “resident domestic corporation,” from engaging in various “combination” transactions with any “interested stockholder” unless certain conditions are met or the corporation has elected in its articles of incorporation to not be subject to these provisions.

A “combination” is generally defined to include (a) a merger or consolidation of the resident domestic corporation or any subsidiary of the resident domestic corporation with the interested stockholder or affiliate or associate of the interested stockholder; (b) any sale, lease, exchange, mortgage, pledge, transfer, or other disposition, in one transaction or a series of transactions, by the resident domestic corporation or any subsidiary of the resident domestic corporation to or with the interested stockholder or affiliate or associate of the interested stockholder having: (i) an aggregate market value equal to 5% or more of the aggregate market value of the assets of the resident domestic corporation, (ii) an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the resident domestic corporation, or (iii) 10% or more of the earning power or net income of the resident domestic corporation; (c) the issuance or transfer in one transaction or series of transactions of shares of the resident domestic corporation or any subsidiary of the resident domestic corporation having an aggregate market value equal to 5% or more of the resident domestic corporation to the interested stockholder or affiliate or associate of the interested stockholder; and (d) certain other transactions with an interested stockholder or affiliate or associate of the interested stockholder.

An “interested stockholder” is generally defined as a person who, together with affiliates and associates, owns (or within three years, did own) 10% or more of a corporation’s voting stock. An “affiliate” of the interested stockholder is any person that directly or indirectly through one or more intermediaries is controlled by or is under common control with the interested stockholder. An “associate” of an interested stockholder is any (a) corporation or organization of which the interested stockholder is an officer or partner or is directly or indirectly the beneficial owner of 10% or more of any class of voting shares of such corporation or organization; (b) trust or other estate in which the interested stockholder has a substantial beneficial interest or as to which the interested stockholder serves as trustee or in a similar fiduciary capacity; or (c) relative or spouse of the interested stockholder, or any relative of the spouse of the interested stockholder, who has the same home as the interested stockholder.

If applicable, the prohibition is for a period of two years after the date of the transaction in which the person became an interested stockholder, unless such transaction is approved by the board of directors prior to the date the interested stockholder obtained such status; or the combination is approved by the board of directors and thereafter is approved at a meeting of the stockholders by the affirmative vote of stockholders representing at least 60% of the outstanding voting power held by disinterested stockholders; and extends beyond the expiration of the two-year period, unless (a) the combination was approved by the board of directors prior to the person becoming an interested stockholder; (b) the transaction by which the person first became an interested stockholder was approved by the board of directors before the person became an interested stockholder; (c) the transaction is approved by the affirmative vote of a majority of the voting power held by disinterested stockholders at a meeting called for that purpose no earlier than two years after the date the person first became an interested stockholder; or (d) if the consideration to be paid to all stockholders other than the interested stockholder is, generally, at least equal to the highest of: (i) the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or in the transaction in which it became an interested stockholder, whichever is higher, plus compounded interest and less dividends paid, (ii) the market value per share of common shares on the date of announcement of the combination and the date the interested stockholder acquired the shares, whichever is higher, plus compounded interest and less dividends paid, or (iii) for holders of preferred stock, the highest liquidation value of the preferred stock, plus accrued dividends, if not included in the liquidation value. With respect to (i) and (ii) above, the interest is compounded at the rate for one-year United States Treasury obligations from time to time in effect.

Applicability of the Nevada business combination law would discourage parties interested in taking control of our company if they cannot obtain the approval of our board of directors. These provisions could prohibit or delay a merger or other takeover or change in control attempt and, accordingly, may discourage attempts to acquire our company even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price. The Company has elected to not be governed by the Nevada business combination provisions.

Control Share Acquisitions

The “control share” provisions of Sections 78.378 to 78.3793, inclusive, of the NRS, apply to “issuing corporations,” which are Nevada corporations with at least 200 stockholders of record, including at least 100 stockholders of record who are Nevada residents, and which conduct business directly or indirectly in Nevada, unless the corporation has elected to not be subject to these provisions.

The control share statute prohibits an acquirer of shares of an issuing corporation, under certain circumstances, from voting its shares of a corporation’s stock after crossing certain ownership threshold percentages, unless the acquirer obtains approval of the target corporation’s disinterested stockholders. The statute specifies three thresholds: (a) one-fifth or more but less than one-third, (b) one-third but less than a majority, and (c) a majority or more, of the outstanding voting power. Generally, once a person acquires shares in excess of any of the thresholds, those shares and any additional shares acquired within 90 days thereof become “control shares” and such control shares are deprived of the right to vote until disinterested stockholders restore the right. These provisions also provide that if control shares are accorded full voting rights and the acquiring person has acquired a majority or more of all voting power, all other stockholders who do not vote in favor of authorizing voting rights to the control shares are entitled to demand payment for the fair value of their shares in accordance with statutory procedures established for dissenters’ rights.

A corporation may elect to not be governed by, or "opt out" of, the control share provisions by making an election in its articles of incorporation or bylaws, provided that the opt-out election must be in place on the 10th day following the date an acquiring person has acquired a controlling interest, that is, crossing any of the three thresholds described above. We have opted out of the control share statutes, and, provided the "opt out" election remains in place, we will not be subject to the control share statutes.

The effect of the Nevada control share statute is that the acquiring person, and those acting in association with the acquiring person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders at an annual or special meeting. The Nevada control share law, if applicable, could have the effect of discouraging takeovers of our company.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

We are a Nevada corporation and generally governed by the Nevada Private Corporations Code, Title 78 of the Nevada Revised Statutes, or NRS.

Section 78.138 of the NRS provides that, unless the corporation's Articles of Incorporation provide otherwise, a director or officer will not be individually liable unless it is proven that (i) the director's or officer's acts or omissions constituted a breach of his or her fiduciary duties, and (ii) such breach involved intentional misconduct, fraud, or a knowing violation of the law. Our Articles of Incorporation provide that no director or officer shall be personally liable to the corporation or any of its stockholders for damages for any breach of fiduciary duty as a director or officer except for liability of a director or officer for (i) acts or omissions involving intentional misconduct, fraud, or a knowing violation of law or (ii) payment of dividends in violation of Section 78-300 of the NRS.

Section 78.7502 of the NRS permits a company to indemnify its directors and officers against expenses, judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with a threatened, pending, or completed action, suit, or proceeding, if the officer or director (i) is not liable pursuant to NRS 78.138, or (ii) acted in good faith and in a manner the officer or director reasonably believed to be in or not opposed to the best interests of the corporation and, if a criminal action or proceeding, had no reasonable cause to believe the conduct of the officer or director was unlawful. Section 78.7502 of the NRS also precludes indemnification by the corporation if the officer or director has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court determines that in view of all the circumstances, the person is fairly and reasonably entitled to indemnity for such expenses and requires a corporation to indemnify its officers and directors if they have been successful on the merits or otherwise in defense of any claim, issue, or matter resulting from their service as a director or officer.

Section 78.751 of the NRS permits a Nevada company to indemnify its officers and directors against expenses incurred by them in defending a civil or criminal action, suit, or proceeding as they are incurred and in advance of final disposition thereof, upon determination by the stockholders, the disinterested board members, or by independent legal counsel. Section 78.751 of NRS requires a corporation to advance expenses as incurred upon receipt of an undertaking by or on behalf of the officer or director to repay the amount if it is ultimately determined by a court of competent jurisdiction that such officer or director is not entitled to be indemnified by the company if so provided in the corporations articles of incorporation, bylaws, or other agreement. Section 78.751 of the NRS further permits the company to grant its directors and officers additional rights of indemnification under its articles of incorporation, bylaws, or other agreement.

Section 78.752 of the NRS provides that a Nevada company may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee, or agent of the company, or is or was serving at the request of the company as a director, officer, employee, or agent of another company, partnership, joint venture, trust, or other enterprise, for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee, or agent, or arising out of his status as such, whether or not the company has the authority to indemnify him against such liability and expenses.

The Bylaws implement the indemnification and insurance provisions permitted by Chapter 78 of the NRS by providing that the Company:

- shall, to the maximum extent and in the manner specified in the [NRS], indemnify each of its directors and officers against expenses, judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding arising by reason of the fact that any such person is or was a director or officer of the Corporation. The Corporation shall have the power to advance expenses incurred in defending any proceeding prior to the disposition of the proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay that amount if it shall be determined ultimately that the person is not entitled to indemnification.

At the present time, there is no pending litigation or proceeding involving a director, officer, employee, or other agent of ours in which indemnification would be required or permitted. We are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

Item 3.02 Unregistered Sales of Equity Securities.

The information contained in Item 1.01 above is incorporated herein by reference in response to this Item 3.02.

The shares of common stock issued to the former shareholders of Actinium in connection with the Share Exchange were offered and sold in a private transaction in reliance upon exemptions from registration pursuant to Section 4(2) of the Securities Act and Regulation S promulgated under the Securities Act. Our reliance on Section 4(2) of the Securities Act was based upon the following factors: (a) the issuance of the securities was an isolated private transaction by us which did not involve a public offering; (b) there were only a limited number of offerees; (c) there were no subsequent or contemporaneous public offerings of the securities by us; (d) the securities were not broken down into smaller denominations; and (e) the negotiations for the sale of the stock took place directly between the offerees and us. Our reliance on Regulation S was based on that such shareholders were not a "U.S. person" as that term is defined in Rule 902(k) of Regulation S under the Act, and that such shareholders were acquiring our common stock, for investment purposes for their own respective accounts and not as nominees or agents, and not with a view to the resale or distribution thereof, and that the shareholders understood that the shares of our common stock may not be sold or otherwise disposed of without registration under the Securities Act or an applicable exemption therefrom.

The securities were offered and sold in reliance upon exemptions from registration pursuant to Section 4(2) of the Securities Act and Rule 506 of Regulation D ("Regulation D") promulgated under the Securities Act. The Company made this determination based on the representations of the investors which included, in pertinent part, that each such investor was an "accredited investor" within the meaning of Rule 501 of Regulation D and upon such further representations from each investor that (i) such investor is acquiring the securities for its own account for investment and not for the account of any other person and not with a view to or for distribution, assignment or resale in connection with any distribution within the meaning of the Securities Act, (ii) such investor agrees not to sell or otherwise transfer the purchased securities or shares underlying such securities unless they are registered under the Securities Act and any applicable state securities laws, or an exemption or exemptions from such registration are available, (iii) such investor has knowledge and experience in financial and business matters such that such investor is capable of evaluating the merits and risks of an investment in us, (iv) such investor had access to all of the Company's documents, records, and books pertaining to the investment and was provided the opportunity to ask questions and receive answers regarding the terms and conditions of the Offering and to obtain any additional information which the Company possessed or was able to acquire without unreasonable effort and expense, and (v) such investor has no need for the liquidity in its investment in us and could afford the complete loss of such investment. In addition, there was no general solicitation or advertising for securities issued in reliance upon Regulation D.

Item 4.01. Changes in Registrant's Certifying Accountant.

(a) Dismissal of Independent Accountant Previously Engaged as Principal Accountant.

On December 28, 2012, the Company dismissed R.R. Hawkins & Associates International, a PC ("Hawkins"), as the independent registered public accounting firm of the Company. The dismissal was approved by the Board of Directors.

The reports of Hawkins on the financial statements of the Company for the fiscal years ended December 31, 2011 and 2010, did not contain any adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles except an explanatory paragraph as to an uncertainty with respect to the Company's ability to continue as a going concern.

During the fiscal years ended December 31, 2011 and 2010, and through the date of this report, there were no (1) disagreements with Hawkins on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements if not resolved to the satisfaction of Hawkins, would have caused them to make reference thereto in their reports on the financial statements for such years; or (2) "reportable events" as defined in Item 304(a)(1)(v) of Regulation S-K.

The Company has requested that Hawkins furnish it with a letter addressed to the SEC stating whether or not it agrees with the above statements and, if not, stating the respects in which it does not agree. A copy of such letter, dated December 28, 2012, indicating that it is in agreement with such disclosures is filed as Exhibit 16.1 to this Form 8-K.

(b) Engagement of New Independent Accountant as Principal Accountant.

On December 28, 2012, the Board of Directors approved the appointment of GBH CPAs, PC ("GBH") as the independent registered public accounting firm of the Company.

During the Company's two most recent fiscal years and the subsequent interim periods preceding GBH's engagement, neither the Company nor anyone on behalf of the Company consulted with GBH regarding the application of accounting principles to any specific completed or contemplated transaction, or the type of audit opinion that might be rendered on the Company's financial statements, and GBH did not provide any written or oral advice that was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue or any matter that was the subject of a "disagreement" or a "reportable event," as such terms are defined in Item 304(a)(1) of Regulation S-K.

Item 5.01 Changes in Control of Registrant.

Reference is made to the disclosure set forth under Item 2.01 of this report, which disclosure is incorporated herein by reference.

Prior to the Share Exchange, Diane S. Button, the former sole officer and director of Cactus, owned 10,000,000 shares of Common Stock, comprising approximately 89.65%, of the issued and outstanding shares, and Bruce Holden owned 926,600, comprising approximately 8.3% of the issued and outstanding shares.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On the Closing Date, Diane S. Button submitted a resignation letter to Cactus resigning from her position as the sole director and officer, effective upon the closing of the Share Exchange. The resignation of Ms. Button was not in connection with any known disagreement with us on any matter.

On the Closing Date, Jack V. Talley, Rosemary Mazanet, MD, PhD, David Nicholson, PhD, Sandesh Seth, MS, MBA, and Sergio Traversa, MBA were appointed by our Board of Directors to fill the vacancies created by the resignation of Ms. Button, effective upon the closing of the Share Exchange.

In addition, on the Closing Date, the Board of Directors appointed Jack V. Talley as the President and Chief Executive Officer, Dragan Cicic, MD as the Chief Operating Officer and Chief Medical Officer, and Enza Guagenti, CPA as the Chief Financial Officer, effective upon the closing of the Share Exchange.

For certain biographical and other information regarding the new directors and officers of the Company, see the disclosure under "Item 2.01—Directors and Executive Officers" of this Report, which disclosure is incorporated herein by reference.

Item 5.05 Amendments to the Registrant's Code of Ethics, Waiver of the Code of Ethics.

On December 28, 2012, the Cactus Board of Directors adopted a Code of Ethics that applies to its executive officers and directors.

The foregoing description of the Code of Ethics is qualified in its entirety by reference to the provisions of the Code of Ethics filed as Exhibit 14.1 to this Report, which is incorporated by reference herein.

Item 5.06 Change in Shell Company Status.

To the extent that we might have been deemed to be a shell company prior to the closing of the Share Exchange, reference is made to the disclosure set forth under Items 2.01 and 5.01 of this Report, which disclosure is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(a) Financial Statements of Business Acquired.

In accordance with Item 9.01(a), the Audited Consolidated Financial Statements for the years ended December 31, 2011 and 2010, and the Unaudited Interim Consolidated Financial Statements for the periods ended September 30, 2012 and 2011 for Actinium are included with this Current Report as exhibit 99.1 and 99.2.

(b) Pro Forma Financial Information.

In accordance with Item 9.01(b), unaudited pro forma combined financial information of Cactus are included with this Current Report as exhibit 99.3.

(c) Shell Company Transactions.

Reference is made to Items 9.01(a) and 9.01(b) and the exhibits referred to therein which are incorporated herein by reference.

(d) Exhibits.

Certain of the agreements filed as exhibits to this Report contain representations and warranties by the parties to the agreements that have been made solely for the benefit of the parties to the agreement. These representations and warranties:

- may have been qualified by disclosures that were made to the other parties in connection with the negotiation of the agreements, which disclosures are not necessarily reflected in the agreements;
- may apply standards of materiality that differ from those of a reasonable investor; and
- were made only as of specified dates contained in the agreements and are subject to subsequent developments and changed circumstances.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date that these representations and warranties were made or at any other time. Investors should not rely on them as statements of fact.

Exhibit Number	Description
2.1	Share Exchange Agreement, dated December 28, 2012, by and among Cactus Ventures, Inc., Actinium Pharmaceuticals, Inc., Diane S. Button, and the shareholders of Actinium Pharmaceuticals, Inc.
3.1	Articles of Incorporation of Cactus Ventures, Inc.(incorporated by reference to Exhibit 3.01 of the Company's Registration Statement on Form 10-SB filed with the SEC on February 5, 2007).
3.2	Amendment No. 1 to the Articles of Incorporation of Cactus Ventures, Inc. (incorporated by reference to Exhibit 3.02 of the Company's Registration Statement on Form 10-SB filed with the SEC on February 5, 2007).
3.3	Amendment No. 2 to the Articles of Incorporation of Cactus Ventures, Inc. (incorporated by reference to Exhibit 3.03 of the Company's Registration Statement on Form 10-SB filed with the SEC on February 5, 2007).
3.4	Amendment No. 3 to the Articles of Incorporation of Cactus Ventures, Inc. (incorporated by reference to Exhibit 3.04 of the Company's Registration Statement on Form 10-SB filed with the SEC on February 5, 2007).
3.5	Fifth Restated Certificate of Incorporation of Actinium Pharmaceuticals, Inc.
3.6	Bylaws of Cactus Ventures, Inc. (incorporated by reference to Exhibit 3.05 of the Company's Registration Statement on Form 10-SB filed with the SEC on February 5, 2007).
3.7	Bylaws of Actinium Pharmaceuticals, Inc.
4.1	Form of A Warrant, dated December 19, 2012.
4.2	Form of B Warrant, dated December 19, 2012.
4.3	Form of Lock Up Agreement, dated December ____, 2012.
10.1	Registration Rights Agreement, by and among Actinium Pharmaceuticals, Inc., General Atlantic Investments Limited, and Certain Stockholders, dated June 30, 2000.
10.2	Amendment No. 1 to June 30, 2000 Registration Rights Agreement, dated September 29, 2011.*
10.3	First Amended and Restated Stockholders Agreement, by and among Actinium Pharmaceuticals, Inc., Actinium Holdings Limited, N.V. Organon, and the Stockholders Listed Therein, dated October 5, 2011.*
10.4	Second Amended and Restated Investor Rights Agreement, by and among Actinium Pharmaceuticals, Inc., Actinium Holdings Limited, and the Investors Listed Therein, dated October 5, 2011.*
10.5	Placement Agent Engagement Agreement, by and between Laidlaw & Company (UK) Ltd. and Actinium Pharmaceuticals, Inc., dated August 7, 2012.*
10.6	Form of Subscription Agreement, dated December 19, 2012.
10.7	Form of Unit Purchase Agreement, dated December 19, 2012.
10.8	Employment Agreement, dated January 2, 2006, between Actinium Pharmaceuticals, Inc. and Dragan Cicic*
10.9	License, Development and Commercialization Agreement between Sloan-Kettering Institute of Cancer Research, and Actinium Pharmaceuticals, Inc., dated February 11, 2002; as amended by the First Amendment dated August 7, 2006*
10.10	Phase I/II Study on the safety and efficiency of 225ACAc-HuM195 in patients with advanced Myeloid malignancies with Millennix Oncology, Averion Project, dated December 6, 2006.*
10.11	Product Development and Patent License Agreement, dated February 27, 2003, by and between Abbott Biotherapeutics and Actinium Pharmaceuticals, Inc.*
10.12	Clinical Trial Agreement, dated July 19, 2012, by and between Fred Hutchinson Cancer Center and Actinium Pharmaceuticals, Inc.*
10.13	Employment Letter between Jack V. Talley and Actinium Pharmaceuticals, Inc., effective August 15, 2012.*
10.14	Employment Letter between Enza Guagenti and Actinium Pharmaceuticals, Inc., effective August 15, 2012.*
10.15	Clinical Trial Agreement, dated January 18, 2001, between Actinium Pharmaceuticals, Inc. and Memorial Sloan Kettering Cancer Center for the purpose of conducting a clinical trial entitled "Phase I/II trial of 213Bi-M195 and cytarabine for Acute Myeloid Leukemia."*
10.16	Clinical Trial Agreement with The Trustees of the University of Pennsylvania, dated November 8, 2012.*
10.17	Clinical Trial Agreement, dated March 27, 2012, with Memorial Sloan Kettering Cancer Center.*
10.18	Clinical Trial Agreement, dated September 22, 2012, with Johns Hopkins University, dated September 24, 2012.*
10.19	License Agreement, dated June 14, 2012, for BC8 antibody with Fred Hutchinson Cancer Research Center.*
10.20	2012 Unit Investor Rights Agreement, dated December 19, 2012, by and among Actinium Pharmaceuticals, Inc., the persons identified on Exhibit A attached thereto hereto, and the Placement Agent (defined below).*
10.21	Project Agreement, dated September 30, 2011, between Actinium Pharmaceuticals, Inc. and Aptiv Solutions, Inc.*
10.22	Proposal, dated March 30, 2007, with IsoTherapeutics Group, LLC.*
10.23	Clinical Trial Agreement with The University of Texas M.D. Anderson Cancer, dated March 1, 2012.*
10.24	Amendment No. 1 to Research Agreement, dated November 7, 2012, between Actinium Pharmaceuticals, Inc. and The University of Texas M.D. Anderson Cancer.*
14.1	Code of Ethics.
16.1	Letter from R.R. Hawkins & Associates International, a PC.
99.1	Audited Consolidated Financial Statements for the years ended December 31, 2011 and 2010 for Actinium.
99.2	Unaudited Interim Consolidated Financial Statements for the periods ended September 30, 2012 and 2011 for Actinium
99.3	Unaudited pro forma combined financial information of Cactus Ventures, Inc. and Actinium Pharmaceuticals, Inc.

* To be filed by amendment due to size limitations.

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: December 31, 2012

CACTUS VENTURES, INC.

By: */s/ Jack V. Talley*
Name: Jack V. Talley
Title: President and Chief Executive Officer

Exhibit 2.1

SHARE EXCHANGE AGREEMENT

BY AND AMONG

CACTUS VENTURES, INC.
AND
DIANE S. BUTTON
AND
ACTINIUM PHARMECEUTICALS, INC.
AND
THE SHAREHOLDERS OF ACTINIUM PHARMECEUTICALS, INC.

Dated as of: December 28, 2012

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SHARE EXCHANGE AGREEMENT

This SHARE EXCHANGE AGREEMENT ("**Agreement**"), dated as of December 28, 2012, is made by and among CACTUS VENTURES, INC., a corporation organized under the laws of Nevada (the "**Acquiror**"), DIANE S. BUTTON (the "**Acquiror Principal Shareholder**"), ACTINIUM PHARMECEUTICALS, INC., a corporation organized under the laws of Delaware (the "**Acquiree**"), and each of the Persons listed on Schedule I hereto who are shareholders of the Acquiree (collectively, the "**Acquiree Shareholders**," and individually an "**Acquiree Shareholder**"). Each of the Acquiror, Acquiror Principal Shareholder, Bruce Holden, Acquiree and Acquiree Shareholders are referred to herein individually as a " **Party**" and collectively as the "**Parties**."

RECITALS:

WHEREAS, Acquiree agreed to pay $250,000 to Acquiror in consideration of Acquiror causing shares of Acquiror Common Stock (as defined below) to be cancelled and all outstanding liabilities of Acquiror to be paid;

WHEREAS, on September 5, 2012, the Acquiree Shareholders approved the entering into a reverse merger transaction, which will result in the Acquiree becoming a subsidiary of a public company whose securities are traded on a public exchange or quotation service in the U.S (the "**Shareholder Approval**");

WHEREAS, in accordance with the Shareholder Approval the Acquiree Shareholders have agreed to transfer to the Acquiror 100% of the Acquiree Shares (as defined below); and the Acquiror has agreed to acquire from the Acquiree Shareholders 100% of the Acquiree Shares (as defined below); and on the Closing Date (as defined below) Acquiree will use its best efforts to cause the Acquiree Shareholders to transfer at least 20% of the Acquiree Shares (as defined below), which Acquiree Shares constitute at least 20% of the outstanding shares of Acquiree Common Stock (as defined below), in exchange for the Acquiror Shares (as defined below), which Acquiror Shares shall constitute approximately 99% (after 100% exchange) of the issued and outstanding shares of Acquiror Common Stock (as defined below) immediately after the closing of the transactions contemplated herein, in each case, on the terms and conditions as set forth herein;

NOW, THEREFORE, in consideration of the foregoing premises, and the covenants, representations and warranties set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and accepted, the Parties, intending to be legally bound, hereby agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1 Definitions
. For all purposes of and under this Agreement, the following terms shall have the following respective meanings:

"**Accredited Investor**" has the meaning set forth in Rule 501 under the Securities Act.

"**Acquiree**" has the meaning set forth in the preamble.

"**Acquiree Common Stock**" means the common stock, $0.01 par value per share, of the Acquiree.

"**Acquiree Indemnified Parties**" means the Acquiree and the Acquiree Shareholders and their respective Affiliates and the officers, directors and representatives of such Persons; provided that (i) the Acquiror shall be a member of the Acquiree Indemnified Parties after the Closing and (ii) none of the Acquiror Principal Shareholder nor the Acquiror Principal Shareholder' Affiliates shall be members of the Acquiree Indemnified Parties at any time.

"**Acquiree Offering**" means the offer and sale by the Acquiree of a minimum of $5,000,000 of units (the "Units"), each Unit consisting of an aggregate of (i) 181,818 shares of Acquiree common stock; (ii) an "A" warrant to purchase 181,818 shares of Acquiree common stock, exercisable at a price of $0.55 per share for a period of one hundred and twenty (120) days from the date of the final closing of the offering; and (iii) a "B" warrant to purchase 90,909 shares of Acquiree common stock, exercisable at a price of $0.825 per share for a period of five (5) years from the date of the final closing.

"**Acquiree Organizational Documents**" has the meaning set forth in Section 4.6.

"**Acquiree Shareholder**" and "**Acquiree Shareholders**" have the respective meanings set forth in the preamble.

"**Acquiree Shares**" has the meaning set forth in Section 2.1.

"**Acquiror**" has the meaning set forth in the recitals.

"**Acquiror Common Stock**" means the common stock, par value $0.01 per share, of the Acquiror.

"**Acquiror Disclosure Schedule**" has the meaning set forth in Article V.

"**Acquiror Most Recent Fiscal Year End**" means December 31, 2011.

"**Acquiror Principal Shareholder**" has the meaning set forth in the preamble.

"**Acquiror Shares**" has the meaning set forth in Section 2.1.

"**Acquisition Transaction**" means any transaction or series of transactions involving: (a) any merger, consolidation, share exchange, business combination, issuance of securities, acquisition of securities, tender offer, exchange offer or other similar transaction; or (b) any sale (other than sales of inventory in the Ordinary Course of Business), lease (other than in the Ordinary Course of Business), exchange, transfer (other than sales of inventory in the Ordinary Course of Business), license (other than nonexclusive licenses in the Ordinary Course of Business), acquisition or disposition of assets.

"**Action**" means any action, suit, inquiry, notice of violation, proceeding (including any partial proceeding such as a deposition) or investigation pending or threatened before or by any court, arbitrator, governmental or administrative agency, regulatory authority (federal, state, county, local or foreign), stock market, stock exchange or trading facility.

"**Affiliate**" has the meaning set forth in Rule 12b-2 of the regulations promulgated under the Exchange Act.

"**Agreement**" has the meaning set forth in the preamble.

"**BHCA**" has the meaning set forth in Section 5.26.

"**Business Day**" shall mean any day other than a Saturday, Sunday or a day on which commercial banks in New York, New York are required or authorized to be closed.

"**Closing**" has the meaning set forth in Section 2.2.

"**Closing Date**" has the meaning set forth in Section 2.2.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Competing Transaction Proposal**" means any inquiry, proposal, indication of interest or offer from any Third Party contemplating or otherwise relating to any Acquisition Transaction directly or indirectly involving the Acquiror, its business or any assets of the Acquiror (including, without limitation, any Acquisition Transaction involving Acquiror Principal Shareholder that would include the Acquiror, its business or any assets of the Acquiror).

"**Contract**" means any written or oral contract, lease, license, indenture, note, bond, agreement, arrangement, understanding, permit, concession, franchise or other instrument.

"**Damages**" has the meaning set forth in Section 12.2.

"**DTC**" has the meaning set forth in Section 5.31.

"**Environmental Laws**" has the meaning set forth in Section 5.17.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, as amended.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, or any similar federal statute, and the rules and regulations of the SEC thereunder, all as the same will then be in effect.

"**FAST**" has the meaning set forth in Section 5.31.

"**Federal Reserve**" has the meaning set forth in Section 5.26.

"**GAAP**" means, with respect to any Person, generally accepted accounting principles in the U.S. applied on a consistent basis with such Person's past practices.

"**Governmental Authority**" means any domestic or foreign, federal or national, state or provincial, municipal or local government, governmental authority, regulatory or administrative agency, governmental commission, department, board, bureau, agency or instrumentality, political subdivision, commission, court, tribunal, official, arbitrator or arbitral body.

"**Hazardous Materials**" has the meaning set forth in Section 5.17.

"**Indebtedness**" means without duplication, (a) all indebtedness or other obligation of the Person for borrowed money, whether current, short-term, or long-term, secured or unsecured, (b) all indebtedness of the Person for the deferred purchase price for purchases of property outside the Ordinary Course of Business, (c) all lease obligations of the Person under leases which are capital leases in accordance with GAAP, (d) any off-balance sheet financing of the Person including synthetic leases and project financing, (e) any payment obligations of the Person in respect of banker's acceptances or letters of credit (other than stand-by letters of credit in support of ordinary course trade payables), (f) any liability of the Person with respect to interest rate swaps, collars, caps and similar hedging obligations, (g) any liability of the Person under deferred compensation plans, phantom stock plans, severance or bonus plans, or similar arrangements made payable as a result of the transactions contemplated herein, (h) any indebtedness referred to in clauses (a) through (g) above of any other Person which is either guaranteed by, or secured by a security interest upon any property owned by, the Person and (i) accrued and unpaid interest of, and prepayment premiums, penalties or similar contractual charges arising as result of the discharge at the Closing of, any such foregoing obligation.

"**Indemnified Party**" has the meaning set forth in Section 12.3(a).

"**Indemnifying Party**" has the meaning set forth in Section 12.3(a).

"**Intellectual Property**" means all industrial and intellectual property, including, without limitation, all U.S. and non-U.S. patents, patent applications, patent rights, trademarks, trademark applications, common law trademarks, Internet domain names, trade names, service marks, service mark applications, common law service marks, and the goodwill associated therewith, copyrights, in both published and unpublished works, whether registered or unregistered, copyright applications, franchises, licenses, know-how, trade secrets, technical data, designs, customer lists, confidential and proprietary information, processes and formulae, all computer software programs or applications, layouts, inventions, development tools and all documentation and media constituting, describing or relating to the above, including manuals, memoranda, and records, whether such intellectual property has been created, applied for or obtained anywhere throughout the world.

"**Knowledge**" shall mean, except as otherwise explicitly provided herein, actual knowledge after reasonable investigation. The Acquiror shall be deemed to have "Knowledge" of a matter if any of its officers, directors, stockholders, or employees has Knowledge of such matter. Phrases such as "to the Knowledge of the Acquiror" or the "Acquiror's Knowledge" shall be construed accordingly.

"**Laws**" means, with respect to any Person, any U.S. or non-U.S., federal, national, state, provincial, local, municipal, international, multinational or other Law (including common law), constitution, statute, code, ordinance, rule, regulation or treaty applicable to such Person.

"**Liability**" means any liability (whether known or unknown, whether asserted or unasserted, whether absolute or contingent, whether accrued or unaccrued, whether liquidated or unliquidated, and whether due or to become due), including any liability for Taxes.

"**License**" means any security clearance, permit, license, variance, franchise, Order, approval, consent, certificate, registration or other authorization of any Governmental Authority or regulatory body, and other similar rights.

"**Lien**" means any mortgage, pledge, security interest, encumbrance, lien or charge of any kind, including, without limitation, any conditional sale or other title retention agreement, any lease in the nature thereof and the filing of or agreement to give any financing statement under the Uniform Commercial Code of any jurisdiction and including any lien or charge arising by Law.

"**Material Adverse Effect**" means, with respect to any Person, a material adverse effect on the business, financial condition, operations, results of operations, assets, customer, supplier or employee relations or future prospects of such Person.

"**Money Laundering Laws**" has the meaning set forth in Section 5.29.

"**Order**" means any order, judgment, ruling, injunction, assessment, award, decree or writ of any Governmental Authority or regulatory body.

"**Ordinary Course of Business**" means the ordinary course of business consistent with past custom and practice (including with respect to quantity and frequency).

"**Party**" and "**Parties**" have the respective meanings set forth in the preamble.

"**Person**" means all natural persons, corporations, business trusts, associations, companies, partnerships, limited liability companies, joint ventures and other entities, governments, agencies and political subdivisions.

"**Post-Closing Period**" has the meaning set forth in Section 9.2.

"**Pre-Closing Period**" has the meaning set forth in Section 9.2.

"**Principal Market**" means the OTC Bulletin Board.

"**Registration Statements**" has the meaning set forth in Section 5.18(b).

"**Regulation S**" means Regulation S under the Securities Act, as the same may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission.

"**SEC**" means the U.S. Securities and Exchange Commission, or any successor agency thereto.

"**SEC Reports**" has the meaning set forth in Section 5.18(a).

"**Securities Act**" means the Securities Act of 1933, as amended, or any similar federal statute, and the rules and regulations of the Commission thereunder, all as the same will be in effect at the time.

"**Share Exchange**" has the meaning set forth in Section 2.1.

"**Tax Return**" means all returns, declarations, reports, estimates, statements, forms and other documents filed with or supplied to or required to be provided to a Governmental Authority with respect to Taxes, including any schedule or attachment thereto and any amendment thereof.

"**Tax**" or "**Taxes**" means all taxes, assessments, duties, levies or other charge imposed by any Governmental Authority of any kind whatsoever together with any interest, penalties, fines or additions thereto and any liability for payment of taxes whether as a result of (i) being a member of an affiliated, consolidated, combined, unitary or similar group for any period, (ii) any tax sharing, tax indemnity or tax allocation agreement or any other express or implied agreement to indemnify any Person, (iii) being liable for another Person's taxes as a transferee or successor otherwise for any period, or (iv) operation of Law.

"**Termination Date**" means January 31, 2012.

"**Third Party**" has the meaning set forth in Section 7.4(a).

"**Third Party Claim**" has the meaning set forth in Section 12.3(a).

"**Transaction Documents**" means, collectively, this Agreement and all agreements, certificates, instruments and other documents to be executed and delivered in connection with the transactions contemplated by this Agreement.

"**Treasury Regulations**" means the income tax regulations, including temporary regulations, promulgated under the Code, as such regulations may be amended from time to time (including corresponding provisions of succeeding regulations).

"**U.S.**" means the United States of America.

"**U.S. Person**" has the meaning set forth in Regulation S under the Securities Act.

ARTICLE II
SHARE EXCHANGE; CLOSING

Section 2.1 Share Exchange. In accordance with the Shareholder Approval, the Acquiree Shareholders have agreed to transfer to the Acquiror 100% of the Acquiree Shares. At the Closing (as defined below), Acquiree will use its best efforts to cause the Acquiree Shareholders to sell, transfer, convey, assign and deliver shares of Acquiree Common Stock (the " **Acquiree Shares**"), representing at least 20% (the "**Minimum Exchange**") of the issued and outstanding shares of Acquiree Common Stock as of December 28, 2012, to the Acquiror, and in consideration therefor the Acquiror shall issue a total of 4,309,015 fully paid and nonassessable share of Acquiror Common Stock (the "**Acquiror Shares**") to the Acquiree Shareholders, as set forth beside the name of each such Acquiree Shareholder on Schedule I hereto (the "**Share Exchange**"). At the Closing each Acquiree Shareholder shall receive 0.333 shares (the "**Exchange Ratio**") of Acquiror Common Stock for each Acquiree Share exchanged. At the Closing all of the Acquiree Shareholders' options and warrants to purchase Acquiree Common Stock will be exchanged at the Exchange Ratio for new options or warrants, as applicable, to purchase Acquiror Common Stock, as set forth on Schedule II.

On or before the fourth (4th) business day after the date of this Agreement, the Acquiror shall file (i) a Current Report on Form 8-K describing all the material terms of the transactions contemplated by this Agreement and (ii) a Schedule 14f-1 Information Statement in the form required by the Exchange Act and attaching all the material transaction documents (including, without limitation, this Agreement.

Section 2.2 Closing. Upon the terms and subject to the conditions of this Agreement, the transactions contemplated by this Agreement shall take place at a closing (the "**Closing**") to be held at the offices of Anslow & Jaclin LLP located at 195 Route 9 South, Manalapan, NJ 07726, at a time and date to be specified by the Parties, which shall be no later than second (2nd) Business Day following the satisfaction or, if permitted pursuant hereto, waiver of the conditions set forth in Article IX, or at such other location, date and time as Acquiree and Acquiror Principal Shareholder shall mutually agree. The date and time of the Closing is referred to herein as the "**Closing Date**."

Section 2.4 Closing Deliveries by Acquiror and Acquiror Principal Shareholder

At the Closing: (a) the Acquiror shall deliver, or cause to be delivered, a certificate evidencing the number of Acquiror Shares, set forth beside each Acquiree Shareholder's name on Schedule I hereto; and (b) the Acquiror and the Acquiror Principal Shareholder, as applicable, shall deliver, or cause to be delivered, to the Acquiree and the Acquiree Shareholders, as applicable, the various documents required to be delivered as a condition to the Closing pursuant to Section 10.2 hereof.

Section 2.5 Closing Deliveries by Acquiree and Acquiree Shareholders

At the Closing: (a) Acquiree shall deliver $250,000 to Acquiror, (b) each Acquiree Shareholder shall deliver, or cause to be delivered, certificate(s) representing such Acquiree Shareholder's Acquiree Shares, accompanied by an executed instrument of transfer for transfer by such Acquiree Shareholder of such Acquiree Shareholder's Acquiree Shares to the Acquiror; and (C) the Acquiree and the Acquiree Shareholders, as applicable, shall deliver, or cause to be delivered, to the Acquiror and the Acquiror Principal Shareholder, as applicable, the various documents required to be delivered as a condition to the Closing pursuant to Section 10.3 hereof.

Section 2.6 Section 368 Reorganization

For U.S. federal income Tax purposes, the Share Exchange is intended to constitute a "reorganization" within the meaning of Section 368(a)(1)(B) of the Code. The Parties hereby adopt this Agreement as a "plan of reorganization" within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the Treasury Regulations. Notwithstanding the foregoing or anything else to the contrary contained in this Agreement, the Parties acknowledge and agree that no Party is making any representation or warranty as to the qualification of the Share Exchange as a reorganization under Section 368 of the Code or as to the effect, if any, that any transaction consummated prior to or after the Closing Date has or may have on any such reorganization status. The Parties acknowledge and agree that each (i) has had the opportunity to obtain independent legal and tax advice with respect to the transaction contemplated by this Agreement, and (ii) is responsible for paying its own Taxes, including without limitation, any adverse Tax consequences that may result if the transaction contemplated by this Agreement is not determined to qualify as a reorganization under Section 368 of the Code.

ARTICLE III
REPRESENTATIONS OF ACQUIREE SHAREHOLDERS

The Acquiree Shareholders severally, and not jointly, hereby represent and warrant to the Acquiror that the statements contained in this Article III are correct and complete as of the date of this Agreement and will be correct and complete as of the Closing Date (as though made then and as thought the Closing Date were substituted for the date of this Agreement throughout this Article III) (except where another date or period of time is specifically stated herein for a representation or warranty).

Section 3.1 Authority

Such Acquiree Shareholder has all requisite authority and power to enter into and deliver this Agreement and any of the other Transaction Documents to which such Acquiree Shareholder is a party, and any other certificate, agreement, document or instrument to be executed and delivered by such Acquiree Shareholder in connection with the transactions contemplated hereby and thereby and to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. This Agreement has been, and each of the Transaction Documents to which such Acquiree Shareholder is a party will be, duly and validly authorized and approved, executed and delivered by such Acquiree Shareholder.

Section 3.2 Binding Obligations

Assuming this Agreement and the Transaction Documents have been duly and validly authorized, executed and delivered by the parties hereto and thereto other than such Acquiree Shareholder, this Agreement and each of the Transaction Documents to which such Acquiree Shareholder is a party are duly authorized, executed and delivered by such Acquiree Shareholder, and constitutes the legal, valid and binding obligations of such Acquiree Shareholder, enforceable against such Acquiree Shareholder in accordance with their respective terms, except as such enforcement is limited by general equitable principles, or by bankruptcy, insolvency and other similar Laws affecting the enforcement of creditors rights generally.

Section 3.3 No Conflicts

Neither the execution or delivery by such Acquiree Shareholder of this Agreement or any Transaction Document to which such Acquiree Shareholder is a party, nor the consummation or performance by such Acquiree Shareholder of the transactions contemplated hereby or thereby will, directly or indirectly, (a) contravene, conflict with, or result in a violation of any provision of the organizational documents of such Acquiree Shareholder (if such Acquiree Shareholder is not a natural Person); (b) contravene, conflict with, constitute a default (or an event or condition which, with notice or lapse of time or both, would constitute a default) under, or result in the termination or acceleration of, any agreement or instrument to which such Acquiree Shareholder is a party or by which the properties or assets of such Acquiree Shareholder are bound; or (c) contravene, conflict with, result in any breach of, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, impair the rights of such Acquiree Shareholder under, or alter the obligations of any Person under, or create in any Person the right to terminate, amend, accelerate or cancel, or require any notice, report or other filing (whether with a Governmental Authority or any other Person) pursuant to, or result in the creation of a Lien on any of the assets or properties of the Acquiror under, any note, bond, mortgage, indenture, Contract, License, permit, franchise or other instrument or obligation to which such Acquiree Shareholder is a party or any of such Acquiree Shareholder's assets and properties are bound or affected, except, in the case of clauses (b) or (c) for any such contraventions, conflicts, violations, or other occurrences as would not have a Material Adverse Effect on such Acquiree Shareholder.

Section 3.4 Ownership of Shares

Such Acquiree Shareholder owns, of record and beneficially, and has good, valid and indefeasible title to and the right to transfer to the Acquiror pursuant to this Agreement, such Acquiree Shareholder's Acquiree Shares free and clear of any and all Liens. there are no options, rights, voting trusts, stockholder agreements or any other Contracts or understandings to which such Acquiree Shareholder is a party or by which such Acquiree Shareholder or such Acquiree Shareholder's Acquiree Shares are bound with respect to the issuance, sale, transfer, voting or registration of such Acquiree Shareholder's Acquiree Shares. At the Closing Date, the Acquiror will acquire good, valid and marketable title to such Acquiree Shareholder's Acquiree Shares free and clear of any and all Liens.

Section 3.5 Certain Proceedings

There is no Action pending against, or to the Knowledge of such Acquiree Shareholder, threatened against or affecting, such Acquiree Shareholder by any Governmental Authority or other Person with respect to such Acquiree Shareholder that challenges, or may have the effect of preventing, delaying, making illegal, or otherwise interfering with, any of the transactions contemplated by this Agreement.

Section 3.6 No Brokers or Finders

No Person has, or as a result of the transactions contemplated herein will have, any right or valid claim against such Acquiree Shareholder for any commission, fee or other compensation as a finder or broker, or in any similar capacity, based upon arrangements made by or on behalf of such Acquiree Shareholder and such Acquiree Shareholder will indemnify and hold the Acquiror and the Acquiror Principal Shareholder harmless against any liability or expense arising out of, or in connection with, any such claim.

Section 3.7 Investment Representations

Each Acquiree Shareholder severally, and not jointly, hereby represents and warrants, solely with respect to itself and not any other Acquiree Shareholder, to the Acquiror as follows:

(a) Purchase Entirely for Own Account. Such Acquiree Shareholder is acquiring such Acquiree Shareholder's portion of the Acquiror Shares proposed to be acquired hereunder for investment for its own account and not with a view to the resale or distribution of any part thereof, and such Acquiror Shareholder has no present intention of selling or otherwise distributing such Acquiror Shares, except in compliance with applicable securities Laws.

(b) Restricted Securities. Such Acquiree Shareholder understands that the Acquiror Shares are characterized as "restricted securities" under the Securities Act inasmuch as this Agreement contemplates that, if acquired by the Shareholder pursuant hereto, the Acquiror Shares would be acquired in a transaction not involving a public offering. The issuance of the Acquiror Shares hereunder is being effected in reliance upon an exemption from registration afforded under Section 4(2) of the Securities Act. Such Acquiree Shareholder further acknowledges that if the Acquiror Shares are issued to such Acquiree Shareholder in accordance with the provisions of this Agreement, such Acquiror Shares may not be resold without registration under the Securities Act or the existence of an exemption therefrom. Such Acquiree Shareholder represents that he is familiar with Rule 144 promulgated under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act

(c) Acknowledgment of Non-Registration. Such Acquiree Shareholder understands and agrees that the Acquiror Shares to be issued pursuant to this Agreement have not been registered under the Securities Act or the securities Laws of any state of the U.S.

(d) Status. By its execution of this Agreement, each Acquiree Shareholder represents and warrants to the Acquiror as indicated on its signature page to this Agreement, either that: (i) such Acquiree Shareholder is an Accredited Investor; or (ii) such Acquiree Shareholder is not a U.S. Person. Each Acquiree Shareholder understands that the Acquiror Shares are being offered and sold to such Acquiree Shareholder in reliance upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of such Acquiree Shareholder set forth in this Agreement, in order that the Acquiror may determine the applicability and availability of the exemptions from registration of the Acquiror Shares on which the Acquiror is relying.

(e) Additional Representations and Warranties. Such Acquiree Shareholder, severally and not jointly, further represents and warrants to the Acquiror as follows: (i) such Person qualifies as an Accredited Investor; (ii) such Person consents to the placement of a legend on any certificate or other document evidencing the Acquiror Shares substantially in the form set forth in Section 3.8(a); (iii) such Person has sufficient knowledge and experience in finance, securities, investments and other business matters to be able to protect such Person's or entity's interests in connection with the transactions contemplated by this Agreement; (iv) such Person has consulted, to the extent that it has deemed necessary, with its tax, legal, accounting and financial advisors concerning its investment in the Acquiror Shares and can afford to bear such risks for an indefinite period of time, including, without limitation, the risk of losing its entire investment in the Acquiror Shares; (v) such Person has had access to the SEC Reports; (vi) such Person has been furnished during the course of the transactions contemplated by this Agreement with all other public information regarding the Acquiror that such Person has requested and all such public information is sufficient for such Person to evaluate the risks of investing in the Acquiror Shares; (vii) such Person has been afforded the opportunity to ask questions of and receive answers concerning the Acquiror and the terms and conditions of the issuance of the Acquiror Shares; (viii) such Person is not relying on any representations and warranties concerning the Acquiror made by the Acquiror or any officer, employee or agent of the Acquiror, other than those contained in this Agreement or the SEC Reports; (ix) such Person will not sell or otherwise transfer the Acquiror Shares, unless either (A) the transfer of such securities is registered under the Securities Act or (B) an exemption from registration of such securities is available; (x) such Person understands and acknowledges that the Acquiror is under no obligation to register the Acquiror Shares for sale under the Securities Act; (xi) such Person represents that the address furnished in Schedule I is the principal residence if he is an individual or its principal business address if it is a corporation or other entity; (xii) such Person understands and acknowledges that the Acquiror Shares have not been recommended by any federal or state securities commission or regulatory authority, that the foregoing authorities have not confirmed the accuracy or determined the adequacy of any information concerning the Acquiror that has been supplied to such Person and that any representation to the contrary is a criminal offense; and (xiii) such Person acknowledges that the representations, warranties and agreements made by such Person herein shall survive the execution and delivery of this Agreement and the purchase of the Acquiror Shares.

(f) Additional Representations and Warranties of Non-U.S. Persons. Each Acquiree Shareholder that is not a U.S. Person, severally and not jointly, further represents and warrants to the Acquiror as follows: (i) at the time of (A) the offer by the Acquiror and (B) the acceptance of the offer by such Person, of the Acquiror Shares, such Person was outside the U.S; (ii) no offer to acquire the Acquiror Shares or otherwise to participate in the transactions contemplated by this Agreement was made to such Person or its representatives inside the U.S.; (iii) such Person is not purchasing the Acquiror Shares for the account or benefit of any U.S. Person, or with a view towards distribution to any U.S. Person, in violation of the registration requirements of the Securities Act; (iv) such Person will make all subsequent offers and sales of the Acquiror Shares either (A) outside of the U.S. in compliance with Regulation S; (B) pursuant to a registration under the Securities Act; or (C) pursuant to an available exemption from registration under the Securities Act; (v) such Person is acquiring the Acquiror Shares for such Person's own account, for investment and not for distribution or resale to others; (vi) such Person has no present plan or intention to sell the Acquiror Shares in the U.S. or to a U.S. Person at any predetermined time, has made no predetermined arrangements to sell the Acquiror Shares and is not acting as an underwriter or dealer with respect to such securities or otherwise participating in the distribution of such securities; (vii) neither such Person, its Affiliates nor any Person acting on behalf of such Person, has entered into, has the intention of entering into, or will enter into any put option, short position or other similar instrument or position in the U.S. with respect to the Acquiror Shares at any time after the Closing Date through the one year anniversary of the Closing Date except in compliance with the Securities Act; (viii) such Person consents to the placement of a legend on any certificate or other document evidencing the Acquiror Shares substantially in the form set forth in Section 3.8(b) and (ix) such Person is not acquiring the Acquiror Shares in a transaction (or an element of a series of transactions) that is part of any plan or scheme to evade the registration provisions of the Securities Act.

(g) Opinion. Such Acquiree Shareholder will not transfer any or all of such Acquiree Shareholder's Acquiror Shares pursuant to Regulation S or absent an effective registration statement under the Securities Act and applicable state securities law covering the disposition of such Acquiree Shareholder's Acquiror Shares, without first providing the Acquiror with an opinion of counsel (which counsel and opinion are reasonably satisfactory to the Acquiror) to the effect that such transfer will be made in compliance with Regulation S or will be exempt from the registration and the prospectus delivery requirements of the Securities Act and the registration or qualification requirements of any applicable U.S. state securities laws

(h) Consent. Such Acquiree Shareholder understands and acknowledges that the Acquiror may refuse to transfer the Acquiror Shares, unless such Acquiree Shareholder complies with Section 3.7 and any other restrictions on transferability set forth herein. Such Acquiree Shareholder consents to the Acquiror making a notation on its records or giving instructions to any transfer agent of the Acquiror's Common Stock in order to implement the restrictions on transfer of the Acquiror Shares

Section 3.8 Stock Legends

Such Acquiree Shareholder hereby agrees with the Acquiror as follows:

(a) The certificates evidencing the Acquiror Shares issued to those Acquiree Shareholders who are Accredited Investors, and each certificate issued in transfer thereof, will bear the following or similar legend:

> THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED EXCEPT (1) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS OR (2) PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS, IN WHICH CASE THE HOLDER MUST, PRIOR TO SUCH TRANSFER, FURNISH TO THE COMPANY AN OPINION OF COUNSEL, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED IN THE MANNER CONTEMPLATED PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS.

(b) The certificates evidencing the Acquiror Shares issued to those Acquiree Shareholders who are not U.S. Persons, and each certificate issued in transfer thereof, will bear the following legend:

> THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED EXCEPT (1) IN ACCORDANCE WITH THE PROVISIONS OF REGULATION S PROMULGATED UNDER THE SECURITIES ACT, AND BASED ON AN OPINION OF COUNSEL, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT THE PROVISIONS OF REGULATION S HAVE BEEN SATISFIED, (2) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS OR (3) PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS, IN WHICH CASE THE HOLDER MUST, PRIOR TO SUCH TRANSFER, FURNISH TO THE COMPANY AN OPINION OF COUNSEL, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED IN THE MANNER CONTEMPLATED PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. HEDGING TRANSACTIONS INVOLVING THE SECURITIES REPRESENTED BY THIS CERTIFICATE MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE SECURITIES ACT.

(c) Other Legends. The certificates representing such Acquiror Shares, and each certificate issued in transfer thereof, will also bear any other legend required under any applicable Law, including, without limitation, any state corporate and state securities law, or Contract.

Section 3.9 Disclosure

No representation or warranty of such Acquiree Shareholder contained in this Agreement or any other Transaction Document and no statement or disclosure made by or on behalf of such Acquiree Shareholder to the Acquiror or the Acquiror Principal Shareholder pursuant to this Agreement or any other agreement contemplated herein contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF THE ACQUIREE

The Acquiree hereby represents and warrants to the Acquiror that the statements contained in this Article IV are correct and complete as of the date of this Agreement and will be correct and complete as of the Closing Date (as though made then and as thought the Closing Date were substituted for the date of this Agreement throughout this Article IV) (except where another date or period of time is specifically stated herein for a representation or warranty).

Section 4.1 Organization and Qualification

The Acquiree is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation or organization, has all requisite corporate authority and power, Licenses, authorizations, consents and approvals to carry on its business as presently conducted and to own, hold and operate its properties and assets as now owned, held and operated by it, and is duly qualified to do business and in good standing in each jurisdiction in which the failure to be so qualified would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect on the Acquiree.

Section 4.2 Authority

The Acquiree has all requisite authority and power (corporate and other), Licenses, authorizations, consents and approvals to enter into and deliver this Agreement and any of the other Transaction Documents to which the Acquiree is a party and any other certificate, agreement, document or instrument to be executed and delivered by the Acquiree in connection with the transactions contemplated hereby and thereby and to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the other Transaction Documents by the Acquiree and the performance by the Acquiree of its obligations hereunder and thereunder and the consummation by the Acquiree of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Acquiree. The Acquiree does not need to give any notice to, make any filing with, or obtain any authorization, consent or approval of any Person or Governmental Authority in order for the Parties to execute, deliver or perform this Agreement or the transactions contemplated hereby. This Agreement has been, and each of the Transaction Documents to which the Acquiree is a party will be, duly and validly authorized and approved, executed and delivered by the Acquiree.

Section 4.3 Binding Obligations

Assuming this Agreement and the Transaction Documents have been duly and validly authorized, executed and delivered by the parties hereto and thereto other than the Acquiree, this Agreement and each of the Transaction Documents to which the Acquiree is a party are duly authorized, executed and delivered by the Acquiree and constitutes the legal, valid and binding obligations of the Acquiree enforceable against the Acquiree in accordance with their respective terms, except as such enforcement is limited by general equitable principles, or by bankruptcy, insolvency and other similar Laws affecting the enforcement of creditors rights generally.

Section 4.4 No Conflicts

Neither the execution nor the delivery by the Acquiree of this Agreement or any Transaction Document to which the Acquiree is a party, nor the consummation or performance by the Acquiree of the transactions contemplated hereby or thereby will, directly or indirectly, (a) contravene, conflict with, or result in a violation of any provision of the Acquiree Organizational Documents, (b) contravene, conflict with or result in a violation of any Law, Order, charge or other restriction or decree applicable to the Acquiree, or by which the Acquiree or any of its respective assets and properties are bound or affected, (c) contravene, conflict with, result in any breach of, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, impair the rights of the Acquiree under, or alter the obligations of any Person under, or create in any Person the right to terminate, amend, accelerate or cancel, or require any notice, report or other filing (whether with a Governmental Authority or any other Person) pursuant to, or result in the creation of a Lien on any of the assets or properties of the Acquiree under, any note, bond, mortgage, indenture, Contract, License, permit, franchise or other instrument or obligation to which the Acquiree is a party or by which the Acquiree or any of its respective assets and properties are bound or affected; or (d) contravene, conflict with, or result in a violation of, the terms or requirements of, or give any Governmental Authority the right to revoke, withdraw, suspend, cancel, terminate or modify, any licenses, permits, authorizations, approvals, franchises or other rights held by the Acquiree or that otherwise relate to the business of, or any of the properties or assets owned or used by, the Acquiree, except, in the case of clauses (b), (c), or (d), for any such contraventions, conflicts, violations, or other occurrences as would not have a Material Adverse Effect on the Acquiree.

Section 4.5 Subsidiaries

The Acquiree does not own, directly or indirectly, any equity or other ownership interest in any corporation, partnership, joint venture or other entity or enterprise. There are no Contracts or other obligations (contingent or otherwise) of the Acquiror to retire, repurchase, redeem or otherwise acquire any outstanding shares of capital stock of, or other ownership interests in, any other Person or to provide funds to or make any investment (in the form of a loan, capital contribution or otherwise) in any other Person.

Section 4.6 Organizational Documents

The Acquiree has delivered or made available to the Acquiror a true and correct copy of the Articles of Incorporation and Bylaws of the Acquiree and any other organizational documents of the Acquiree, each as amended, and each such instrument is in full force and effect (the "**Acquiree Organizational Documents**"). The Acquiree is not in violation of any of the provisions of the Acquiree Organizational Documents.

Section 4.7 Capitalization

(a) The total authorized shares of capital stock of Acquiree currently consists of (1) 283,463,176 shares of Common Stock, par value $0.01 per share, and (2) 41,536,824 shares of preferred stock, par value $0.01 per share, 1,000,000 of which are designated Series A Preferred Stock, 4,711,247 of which are designated Series B Preferred Stock, 800,000 of which are designated Series C-1 Preferred Stock, 666,667 of which are designated as Series C-2 Preferred Stock, 502,604 of which are designated Series C-3 Preferred Stock, 4,250,000 of which are designated as Series C-4 Preferred Stock, 3,000,000 of which are designated as Series D Preferred Stock, and 26,606,306 of which are designated as Series E Preferred Stock. At the close of business on December __, 2012, 2,407,545 shares of our Common Stock were issued and outstanding, all authorized shares of Series A, B, C-1, C-2, C-3, C-4 and D Preferred Shares were issued and outstanding and 26,606,306 shares of our Series E Preferred Stock were issued and outstanding. We are authorized under our 2003 Stock Option Plan to issue options to purchase up to 10,283,480 shares of our Common Stock. As of December __, 2012, Acquiree had stock options outstanding to purchase 5,947,400 shares of Common Stock. Except as set forth above, no shares of capital stock or other voting securities of the Acquiree were issued, reserved for issuance or outstanding. All outstanding shares of the capital stock of the Acquiree are, and all such shares that may be issued prior to the Closing Date will be when issued, duly authorized, validly issued, fully paid and nonassessable and not subject to or issued in violation of any purchase option, call option, right of first refusal, preemptive right, subscription right or any similar right under any provision of the Laws of the jurisdiction of the Acquiree's formation, the Acquiree Organizational Documents or any Contract to which the Acquiree is a party or otherwise bound. There are not any bonds, debentures, notes or other Indebtedness of the Acquiree having the right to vote (or convertible into, or exchangeable for, securities having the right to vote) on any matters on which holders of Acquiree Common Stock may vote. Except pursuant provided otherwise, there are no options, warrants, rights, convertible or exchangeable securities, "phantom" stock rights, stock appreciation rights, stock-based performance units, commitments, Contracts, arrangements or undertakings of any kind to which the Acquiree is a party or by which it is bound (x) obligating the Acquiree to issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock or other equity interests in, or any security convertible or exercisable for or exchangeable into any capital stock of or other equity interest in, the Acquiree, (y) obligating the Acquiree to issue, grant, extend or enter into any such option, warrant, call, right, security, commitment, Contract, arrangement or undertaking or (z) that give any Person the right to receive any economic benefit or right similar to or derived from the economic benefits and rights occurring to holders of the capital stock of the Acquiree. There are no outstanding Contracts or obligations of the Acquiree to repurchase, redeem or otherwise acquire any shares of capital stock of the Acquiree. There are no registration rights, proxies, voting trust agreements or other agreements or understandings with respect to any class or series of any capital stock or other security of the Acquiree.

Section 4.8 No Brokers or Finders

No Person has, or as a result of the transactions contemplated herein will have, any right or valid claim against the Acquiree for any commission, fee or other compensation as a finder or broker, or in any similar capacity, based upon arrangements made by or on behalf of the Acquiree, and the Acquiree will indemnify and hold the Acquiror and the Acquiror Principal Shareholder and harmless against any liability or expense arising out of, or in connection with, any such claim.

Section 4.9 Disclosure

No representation or warranty of the Acquiree contained in this Agreement and no statement or disclosure made by or on behalf of the Acquiree to the Acquiror or the Acquiror Principal Shareholder pursuant to this Agreement or any other agreement contemplated herein contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading.

ARTICLE V
REPRESENTATIONS AND WARRANTIES OF THE ACQUIROR AND
ARTICLE VITHE ACQUIROR PRINCIPAL SHAREHOLDER

The Acquiror and the Acquiror Principal Shareholder, jointly and severally, hereby represent and warrant to the Acquiree and each of the Acquiree Shareholders, subject to the exceptions and qualifications specifically set forth or disclosed in writing in the disclosure schedule delivered by the Acquiror Principal Shareholder to the Acquiree and the Acquiree Shareholders simultaneously herewith (the "**Acquiror Disclosure Schedule**"), that the statements contained in this Article V are correct and complete as of the date of this Agreement and will be correct and complete as of the Closing Date (as though made then and as thought the Closing Date were substituted for the date of this Agreement throughout this Article V) (except where another date or period of time is specifically stated herein for a representation or warranty). The Acquiror Disclosure Schedule shall be arranged according to the numbered and lettered paragraphs of this Article V and any disclosure in the Acquiror Disclosure Schedule shall qualify the corresponding paragraph in this Article V. The Acquiree, the Acquiree Shareholders and, after the Closing, the Acquiror, shall be entitled to rely on the representations and warranties set forth in this Article V regardless of any investigation or review conducted by the Acquiree or the Acquiree Shareholders prior to the Closing.

Section 6.1 Organization and Qualification

The Acquiror is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation or organization, has all requisite corporate authority and power, Licenses, authorizations, consents and approvals to carry on its business as presently conducted and to own, hold and operate its properties and assets as now owned, held and operated by it, and is duly qualified to do business and in good standing in each jurisdiction in which the failure to be so qualified would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect on the Acquiror.

Section 6.2 Authority

The Acquiror and the Acquiror Principal Shareholder have all requisite authority and power, Licenses, authorizations, consents and approvals to enter into and deliver this Agreement and any of the other Transaction Documents to which the Acquiror, the Acquiror Principal Shareholder or any of them is a party and any other certificate, agreement, document or instrument to be executed and delivered by the Acquiror, the Acquiror Principal Shareholder or any of them in connection with the transactions contemplated hereby and thereby and to perform their respective obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the other Transaction Documents by the Acquiror and the Acquiror Principal Shareholder and the performance by the Acquiror and the Acquiror Principal Shareholder of their respective obligations hereunder and thereunder and the consummation by the Acquiror and the Acquiror Principal Shareholder of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Acquiror and the Acquiror Principal Shareholder. Neither the Acquiror nor the Acquiror Principal Shareholder needs to give any notice to, make any filing with, or obtain any authorization, consent or approval of any Person or Governmental Authority in order for the Parties to execute, deliver or perform this Agreement or the transactions contemplated hereby. This Agreement has been, and each of the Transaction Documents to which the Acquiror, the Acquiror Principal Shareholder or any of them, as applicable, are a party will be, duly and validly authorized and approved, executed and delivered by the Acquiror and the Acquiror Principal Shareholder.

Section 6.3 Binding Obligations

Assuming this Agreement and the Transaction Documents have been duly and validly authorized, executed and delivered by the parties hereto and thereto other than the Acquiror and the Acquiror Principal Shareholder, this Agreement and each of the Transaction Documents to which the Acquiror, the Acquiror Principal Shareholder or any of them, as applicable, are a party are duly authorized, executed and delivered by the Acquiror and such Acquiror Principal Shareholder, as applicable, and constitutes the legal, valid and binding obligations of the Acquiror and such Acquiror Principal Shareholder, as applicable, enforceable against the Acquiror and such Acquiror Principal Shareholder, as applicable, in accordance with their respective terms, except as such enforcement is limited by general equitable principles, or by bankruptcy, insolvency and other similar Laws affecting the enforcement of creditors rights generally.

Section 6.4 No Conflicts

Neither the execution nor the delivery by the Acquiror or the Acquiror Principal Shareholder of this Agreement or any Transaction Document to which the Acquiror, the Acquiror Principal Shareholder or any of them is a party, nor the consummation or performance by the Acquiror and the Acquiror Principal Shareholder of the transactions contemplated hereby or thereby will, directly or indirectly, (a) contravene, conflict with, or result in a violation of any provision of the Acquiror Organizational Documents, (b) contravene, conflict with or result in a violation of any Law, Order, charge or other restriction or decree of any Governmental Authority or any rule or regulation of the Principal Market applicable to the Acquiror or the Acquiror Principal Shareholder, or by which the Acquiror or the Acquiror Principal Shareholder or any of their respective assets and properties are bound or affected, (c) contravene, conflict with, result in any breach of, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, impair the rights of the Acquiror under, or alter the obligations of any Person under, or create in any Person the right to terminate, amend, accelerate or cancel, or require any notice, report or other filing (whether with a Governmental Authority or any other Person) pursuant to, or result in the creation of a Lien on any of the assets or properties of the Acquiror under, any note, bond, mortgage, indenture, Contract, License, permit, franchise or other instrument or obligation to which the Acquiror or the Acquiror Principal Shareholder is a party or by which the Acquiror or the Acquiror Principal Shareholder or any of their respective assets and properties are bound or affected; or (d) contravene, conflict with, or result in a violation of, the terms or requirements of, or give any Governmental Authority the right to revoke, withdraw, suspend, cancel, terminate or modify, any Licenses, permits, authorizations, approvals, franchises or other rights held by the Acquiror or that otherwise relate to the business of, or any of the properties or assets owned or used by, the Acquiror, except, in the case of clauses (b), (c), or (d), for any such contraventions, conflicts, violations, or other occurrences as would not have a Material Adverse Effect on the Acquiror.

Section 6.5 Subsidiaries

The Acquiror does not own, directly or indirectly, any equity or other ownership interest in any corporation, partnership, joint venture or other entity or enterprise. There are no Contracts or other obligations (contingent or otherwise) of the Acquiror to retire, repurchase, redeem or otherwise acquire any outstanding shares of capital stock of, or other ownership interests in, any other Person or to provide funds to or make any investment (in the form of a loan, capital contribution or otherwise) in any other Person.

Section 6.6 Organizational Documents

The Acquiror has delivered or made available to Acquiree a true and correct copy of the Certificate of Incorporation and Bylaws of the Acquiror and any other organizational documents of the Acquiror, each as amended, and each such instrument is in full force and effect (the "**Acquiror Organizational Documents**"). The Acquiror is not in violation of any of the provisions of its Acquiror Organizational Documents. The minute books (containing the records or meetings of the stockholders, the board of directors and any committees of the board of directors), the stock certificate books, and the stock record books of the Acquiror, each as provided or made available to the Acquiree, are correct and complete.

Section 6.7 Capitalization

(a) The authorized capital stock of the Acquiror consists of (i) 100,000,000 shares of Acquiror Common Stock of which (A) 11,155,008 shares of Acquiror Common Stock are issued and outstanding; and (ii) 100,000,000 shares of preferred stock, $0.01 par value per share, of which no shares of preferred stock are outstanding. No shares of Acquiror Common Stock or any other class of preferred stock of the Acquiror are held by the Acquiror in its treasury. Except as set forth above, no shares of capital stock or other voting securities of the Acquiror were issued, reserved for issuance or outstanding. All outstanding shares of the capital stock of the Acquiror are, and all such shares that may be issued prior to the Closing Date will be when issued, duly authorized, validly issued, fully paid and nonassessable and not subject to or issued in violation of any purchase option, call option, right of first refusal, preemptive right, subscription right or any similar right under any provision of the Laws of the jurisidication of the Acquiror's organization, the Acquiror Organizational Documents or any Contract to which the Acquiror is a party or otherwise bound. There are not any bonds, debentures, notes or other Indebtedness of the Acquiror having the right to vote (or convertible into, or exchangeable for, securities having the right to vote) on any matters on which holders of Acquiror Common Stock may vote. There are no options, warrants, rights, convertible or exchangeable securities, "phantom" stock rights, stock appreciation rights, stock-based performance units, commitments, Contracts, arrangements or undertakings of any kind to which the Acquiror is a party or by which it is bound (x) obligating the Acquiror to issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock or other equity interests in, or any security convertible or exercisable for or exchangeable into any capital stock of or other equity interest in, the Acquiror, (y) obligating the Acquiror to issue, grant, extend or enter into any such option, warrant, call, right, security, commitment, Contract, arrangement or undertaking or (z) that give any Person the right to receive any economic benefit or right similar to or derived from the economic benefits and rights occurring to holders of the capital stock of the Acquiror. Except as contemplated by the Spin Out, there are no outstanding Contracts or obligations of the Acquiror to repurchase, redeem or otherwise acquire any shares of capital stock of the Acquiror. There are no registration rights, proxies, voting trust agreements or other agreements or understandings with respect to any class or series of any capital stock or other security of the Acquiror. The stockholder list provided to the Acquiree and the Acquiree Shareholders is a current stockholder list generated by its stock transfer agent, and such list accurately reflects all of the issued and outstanding shares of the Acquiror Common Stock.

(b) The issuance of the Acquiror Shares to the Acquiree Shareholders has been duly authorized and, upon delivery to the Acquiree Shareholders of certificates therefor, respectively, in accordance with the terms of this Agreement, the Acquiror Shares, will have been validly issued and fully paid, and will be nonassessable, have the rights, preferences and privileges specified, will be free of preemptive rights and will be free and clear of all Liens and restrictions, other than Liens created by the Acquiree Shareholders, and restrictions on transfer imposed by this Agreement and the Securities Act.

Section 6.8 Compliance with Laws

The business and operations of the Acquiror have been and are being conducted in accordance with all applicable Laws and Orders. The Acquiror is not in conflict with, or in default or violation of and, to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, is not under investigation with respect to and has not been threatened to be charged with or given notice of any violation of or default under, any (i) Law, rule, regulation, judgment or Order, or (ii) note, bond, mortgage, indenture, Contract, License, permit, franchise or other instrument or obligation to which the Acquiror or the Acquiror Principal Shareholder is a party or by which the Acquiro or the Acquiror Principal Shareholder or any of their respective assets and properties are bound or affected. There is no agreement, judgment or Order binding upon the Acquiror or the Acquiror Principal Shareholder which has, or could reasonably be expected to have, the effect of prohibiting or materially impairing any business practice of the Acquiror or the conduct of business by the Acquiror as currently conducted. The Acquiror has filed all forms, reports and documents required to be filed with any Governmental Authority and the Acquiror has made available such forms, reports and documents to Acquiree and the Acquiree Shareholders. As of their respective dates, such forms, reports and documents complied in all material respects with the applicable requirements pertaining thereto and none of such forms, reports and documents contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

Section 6.9 Certain Proceedings

There is no Action pending against, or to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, threatened against or affecting, the Acquiror or the Acquiror Principal Shareholder by any Governmental Authority or other Person with respect to the Acquiror or their respective businesses or that challenges, or may have the effect of preventing, delaying, making illegal, or otherwise interfering with, any of the transactions contemplated by this Agreement. The Acquiror is not in violation of and, to the Knowledge of Acquiror or the Acquiror Principal Shareholder, is not under investigation with respect to and has not been threatened to be charged with or given notice of any violation of, any applicable Law, rule, regulation, judgment or Order. Neither the Acquiror, nor any director or officer (in his or her capacity as such) of the Acquiror, is or has been the subject of any Action involving a claim or violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty.

Section 6.10 No Brokers or Finders

No Person has, or as a result of the transactions contemplated herein will have, any right or valid claim against the Acquiror or the Acquiror Principal Shareholder for any commission, fee or other compensation as a finder or broker, or in any similar capacity, based upon arrangements made by or on behalf of the Acquiror or the Acquiror Principal Shareholder, and the Acquiror Principal Shareholder will indemnify and hold the Acquiror, the Acquiree and the Acquiree Shareholders and harmless against any liability or expense arising out of, or in connection with, any such claim.

Section 6.11 Contracts

Except as disclosed in the SEC Reports, there are no Contracts that are material to the business, properties, assets, condition (financial or otherwise), results of operations or prospects of the Acquiror. The Acquiror is not in violation of or in default under (nor does there exist any condition which upon the passage of time or the giving of notice would cause such a violation of or default under) any Contract to which it is a party or to which it or any of its properties or assets is subject, except for violations or defaults that would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect of the Acquiror.

Section 6.12 Tax Matters

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(a) Tax Returns. The Acquiror has filed all Tax Returns required to be filed (if any) by or on behalf of the Acquiror and has paid all Taxes of the Acquiror required to have been paid (whether or not reflected on any Tax Return). No Governmental Authority in any jurisdiction has made a claim, assertion or threat to the Acquiror that the Acquiror is or may be subject to taxation by such jurisdiction; there are no Liens with respect to Taxes on the Acquiror's property or assets; and there are no Tax rulings, requests for rulings, or closing agreements relating to the Acquiror for any period (or portion of a period) that would affect any period after the date hereof.

(b) No Adjustments, Changes. Neither the Acquiror nor any other Person on behalf of the Acquiror (a) has executed or entered into a closing agreement pursuant to Section 7121 of the Code or any predecessor provision thereof or any similar provision of state, local or foreign law; or (b) has agreed to or is required to make any adjustments pursuant to Section 481(a) of the Code or any similar provision of state, local or foreign law.

(c) No Disputes. There is no pending audit, examination, investigation, dispute, proceeding or claim with respect to any Taxes of the Acquiror, nor is any such claim or dispute pending or contemplated. The Acquiror has delivered to the Acquiree true, correct and complete copies of all Tax Returns and examination reports and statements of deficiencies assessed or asserted against or agreed to by the Acquiror, if any, since its inception and any and all correspondence with respect to the foregoing.

(d) Not a U.S. Real Property Holding Corporation. The Acquiror is not and has not been a U.S. real property holding corporation within the meaning of Section 897(c)(2) of the Code at any time during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(e) No Tax Allocation, Sharing. The Acquiror is not and has not been a party to any Tax allocation or sharing agreement.

(f) No Other Arrangements. The Acquiror is not a party to any Contract or arrangement for services that would result, individually or in the aggregate, in the payment of any amount that would not be deductible by reason of Section 162(m), 280G or 404 of the Code. The Acquiror is not a "consenting corporation" within the meaning of Section 341(f) of the Code. The Acquiror does not have any "tax-exempt bond financed property" or "tax-exempt use property" within the meaning of Section 168(g) or (h), respectively of the Code. The Acquiror does not have any outstanding closing agreement, ruling request, request for consent to change a method of accounting, subpoena or request for information to or from a Governmental Authority in connection with any Tax matter. During the last two years, has not engaged in any exchange with a related party (within the meaning of Section 1031(f) of the Code) under which gain realized was not recognized by reason of Section 1031 of the Code. The Acquiror is not a party to any reportable transaction within the meaning of Treasury Regulation Section 1.6011-4.

Section 6.13 Labor Matters

(a) There are no collective bargaining or other labor union agreements to which the Acquiror is a party or by which it is bound. No material labor dispute exists or, to the Knowledge of the Acquiror, is imminent with respect to any of the employees of the Acquiror.

(b) Except as set forth in Section 5.13 of the Acquiror Disclosure Schedule, the Acquiror does not have any any employees, independent contractors or other Persons providing services to them. The Acquiror is in full compliance with all Laws regarding employment, wages, hours, benefits, equal opportunity, collective bargaining, the payment of Social Security and other taxes, and occupational safety and health. The Acquiror is not liable for the payment of any compensation, damages, taxes, fines, penalties or other amounts, however designated, for failure to comply with any of the foregoing Laws.

(c) No director, officer or employee of the Acquiror is a party to, or is otherwise bound by, any Contract (including any confidentiality, non-competition or proprietary rights agreement) with any other Person that in any way adversely affects or will materially affect (a) the performance of his or her duties as a director, officer or employee of the Acquiror or (b) the ability of the Acquiror to conduct its business. Each employee of the Acquiror is employed on an at-will basis and the Acquiror does not have any Contract with any of its employees which would interfere with its ability to discharge its employees.

Section 6.14 Employee Benefits

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(a) The Acquiror has not, or ever has, maintained or contributed to any bonus, pension, profit sharing, deferred compensation, incentive compensation, stock ownership, stock purchase, stock option, phantom stock, retirement, vacation, severance, disability, death benefit, hospitalization, medical or other plan, arrangement or understanding (whether or not legally binding) providing benefits to any current or former employee, officer or director of the Acquiror. There are not any employment, consulting, indemnification, severance or termination agreements or arrangements between the Acquiror and any current or former employee, officer or director of the Acquiror, nor does the Acquiror have any general severance plan or policy.

(b) The Acquiror has not, or ever has, maintained or contributed to any "employee pension benefit plans" (as defined in Section 3(2) of ERISA), "employee welfare benefit plans" (as defined in Section 3(1) of ERISA) or any other benefit plan for the benefit of any current or former employees, consultants, officers or directors of the Acquiror.

(c) Neither the consummation of the transactions contemplated hereby alone, nor in combination with another event, with respect to each director, officer, employee and consultant of the Acquiror, will result in (a) any payment (including, without limitation, severance, unemployment compensation or bonus payments) becoming due from the Acquiror, (b) any increase in the amount of compensation or benefits payable to any such individual or (c) any acceleration of the vesting or timing of payment of compensation payable to any such individual. No arrangement or other Contract of the Acquiror provides benefits or payments contingent upon, triggered by, or increased as a result of a change in the ownership or effective control of the Acquiror.

Section 6.15 Title to Assets

The Acquiror does not own any real property. The Acquiror has sufficient title to, or valid leasehold interests in, all of its properties and assets used in the conduct of its businesses. All such assets and properties, other than assets and properties in which the Acquiror has leasehold interests, are free and clear of all Liens, except for Liens that, in the aggregate, do not and will not materially interfere with the ability of the Acquiror to conduct business as currently conducted.

Section 6.16 Intellectual Property

The Acquiror does not own, use or license any Intellectual Property in its business as presently conducted.

Section 6.17 Environmental Laws

The Acquiror (a) is in compliance with all Environmental Laws (as defined below), (b) has received all Licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (c) is in compliance with all terms and conditions of any such License or approval where, in each of the foregoing clauses (a), (b) and (c), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect on the Acquiror. The term "**Environmental Laws**" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "**Hazardous Materials**") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, Licenses, notices or notice letters, Orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

Section 6.18 SEC Reports

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(a) The Acquiror has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC since February 5, 2007, pursuant to the Exchange Act (the "**SEC Reports**").

(b) As of their respective dates, the SEC Reports and any registration statements filed by the Acquiror under the Securities Act (the "**Registration Statements**") complied in all material respects with the requirements of the Exchange Act and the Securities Act, as applicable, and the rules and regulations of the SEC promulgated thereunder, and none of the SEC Reports or Registration Statements, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. All material Contracts to which the Acquiror is a party or to which the property or assets of the Acquiror are subject have been filed as exhibits to the SEC Reports and the Registration Statements as and to the extent required under the Exchange Act and the Securities Act, as applicable. The financial statements of the Acquiror included in the SEC Reports and the Registration Statements comply in all respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing, were prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto, or, in the case of unaudited statements as permitted by Form 10-Q), and fairly present in all material respects (subject in the case of unaudited statements, to normal, recurring audit adjustments) the financial position of the Acquiror as at the dates thereof and the results of its operations and cash flows for the periods then ended. The Acquiror was originally organized and operated as a bona fide operating business without any pre-existing plan or strategy that the Acquiror would serve primarily as a merger or acquisition candidate for an unidentified company or companies. On February 5, 2007 the Acquiror filed a Form 10 indicating its shell status. The disclosure set forth in the SEC Reports and Registration Statements regarding the Acquiror's business is current and complete and accurately reflects operations of the Acquiror as it exists as of the date hereof.

Section 6.19 Internal Accounting Controls

The Acquiror maintains a system of internal accounting controls sufficient to provide reasonable assurance that (a) transactions are executed in accordance with management's general or specific authorizations, (b) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (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 the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Acquiror has established disclosure controls and procedures for the Acquiror and designed such disclosure controls and procedures to ensure that material information relating to the Acquiror is made known to the officers by others within the Acquiror. The Acquiror's officers have evaluated the effectiveness of the Acquiror's controls and procedures. Since the Acquiror Most Recent Fiscal Year End, there have been no significant changes in the Acquiror's internal controls or, to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, in other factors that could significantly affect the Acquiror's internal controls.

Section 6.20 Listing and Maintenance Requirements

The Acquiror is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with the listing and maintenance requirements for continued listing or quotation of the Acquiror Common Stock on the trading market on which the Acquiror Common Stock is currently listed or quoted. The issuance and sale of the Acquiror Shares under this Agreement does not contravene the rules and regulations of the trading market on which the Acquiror Common Stock is currently listed or quoted, and no approval of the stockholders of the Acquiror is required for the Acquiror to issue and deliver to the Acquiree Shareholders the Acquiror Shares contemplated by this Agreement.

Section 6.21 Application of Takeover Protections

The Acquiror has taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Acquiror Organizational Documents or the Laws of its state of incorporation that is or could become applicable to the transactions contemplated hereby.

Section 6.22 Transactions With Affiliates and Employees

Except as disclosed in the SEC Reports, no officer, director, employee or stockholder of the Acquiror or any Affiliate of any such Person, has or has had, either directly or indirectly, an interest in any transaction with the Acquiror (other than for services as employees, officers and directors), including any Contract or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any such Person or, to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, any entity in which any such Person has an interest or is an officer, director, trustee or partner.

Section 6.23 Liabilities

Except as set forth on Section 5.23 of the Acquiror Disclosure Schedule, the Acquiror does not have any Liability (and there is no Action pending, or to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, threatened against the Acquiror that would reasonably be expected to give rise to any Liability). The Acquiror is not a guarantor nor is either otherwise liable for any Liability or obligation (including Indebtedness) of any other Person. There are no financial or contractual obligations of the Acquiror (including any obligations to issue capital stock or other securities) executory after the Closing Date. All Liabilities of the Acquiror shall have been paid off at or prior to the Closing and shall in no event remain Liabilities of the Acquiror, the Acquiree or the Acquiree Shareholders following the Closing.

Section 6.24 Bank Accounts and Safe Deposit Boxes

The Acquiror does not have any bank or other deposit or financial account, nor does the Acquiror have any lock boxes or safety deposit boxes.

Section 6.25 Investment Company

The Acquiror is, nor is it an affiliate of, and immediately following the Closing will not have become, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

Section 6.26 Bank Holding Company Act

The Acquiror is not subject to the Bank Holding Company Act of 1956, as amended (the "**BHCA**") and to regulation by the Board of Governors of the Federal Reserve System (the "**Federal Reserve**"). Neither the Acquiror nor any of its Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any equity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Acquiror nor any of its Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

Section 6.27 Public Utility Holding Act

The Acquiror is not a "holding company," or an "affiliate" of a "holding company," as such terms are defined in the Public Utility Holding Act of 2005.

Section 6.28 Federal Power Act

The Acquiror is not subject to regulation as a "public utility" under the Federal Power Act, as amended.

Section 6.29 Money Laundering Laws

The operations of the Acquiror are and have been conducted at all times in 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 U.S. and non-U.S. jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Authority (collectively, the "**Money Laundering Laws**") and no Proceeding involving the Acquiror with respect to the Money Laundering Laws is pending or, to the knowledge of the Acquiror, threatened.

Section 6.30 Foreign Corrupt Practices

The Acquiror nor, to the Knowledge of the Acquiror or the Acquiror Principal Shareholder, any director, officer, agent, employee or other Person acting on behalf of the Acquiror has not, in the course of its actions for, or on behalf of, the Acquiror (a) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses 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 U.S. Foreign Corrupt Practices Act of 1977, as amended; or (d) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

Section 6.31 DTC Eligibility

The Acquiror Common Stock is eligible for clearance and settlement through The Depository Trust Company ("**DTC**"). There is no DTC "chill" or equivalent on the Acquiror Common Stock. The name, address, telephone number, fax number, contact person and email address of the Acquiror's transfer agent is set forth in Section 5.31 of the Acquiror Disclosure Schedule.

Section 6.32 Absence of Certain Changes or Events

Except as set forth in the SEC Reports, from the Acquiror Most Recent Fiscal Year End (a) the Acquiror have conducted its business only in Ordinary Course of Business; (b) there has not been any change in the assets, Liabilities, financial condition or operating results of the Acquiror, except changes in the Ordinary Course of Business that have not caused, in the aggregate, a Material Adverse Effect on the Acquiror; and (iii) the Acquiror has not completed or undertaken any of the actions set forth in Section 6.2. The Acquiror has not taken any steps to seek protection pursuant to any Law or statute relating to bankruptcy, insolvency, reorganization, receivership, liquidation or winding up, nor does the Acquiror have any Knowledge or reason to believe that any of their respective creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so.

Section 6.33 Disclosure

All documents and other papers delivered or made available by or on behalf of the Acquiror, or the Acquiror Principal Shareholder in connection with this Agreement are true, complete, correct and authentic in all material respects. No representation or warranty of the Acquiror or the Acquiror Principal Shareholder contained in this Agreement and no statement or disclosure made by or on behalf of the Acquiror, or the Acquiror Principal Shareholder to the Acquiree or any Acquiree Shareholder pursuant to this Agreement or any other agreement contemplated herein contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading.

Section 6.34 Undisclosed Events

No event, Liability, development or circumstance has occurred or exists, or is contemplated to occur with respect to the Acquiror or its businesses, properties, prospects, operations or financial condition, that would be required to be disclosed by the Acquiror under applicable securities laws on a registration statement on Form S-1 filed with the SEC relating to an issuance and sale by the Acquiror of its common stock and which has not been publicly announced or will not be publicly announced in a current report on Form 8-K filed by the Acquiror filed within four (4) Business Days after the Closing.

Section 6.35 Non-Public Information

Neither the Acquiror nor any Person acting on its behalf has provided the Acquiree or Acquiree Shareholders or their respective agents or counsel with any information that the Acquiror or the believes constitutes material, non-public information except insofar as the existence and terms of the proposed transactions hereunder may constitute such information and except for information that will be disclosed by the Acquiror in a current report on Form 8-K filed by the Acquiror within four (4) Business Days after the Closing.

ARTICLE VII
CONDUCT PRIOR TO CLOSING

Section 7.1 Conduct of Business

At all times during the period commencing with the execution and delivery of this Agreement and continuing until the earlier of the termination of this Agreement pursuant to the terms hereof or the Closing, the Acquiror Principal Shareholder shall, and shall cause the Acquiror to, (a) carry on its business diligently and in the usual, regular and Ordinary Course of Business, in substantially the same manner as heretofore conducted and in compliance with all applicable Laws, (b) pay or perform its material obligations when due, (c) use its commercially reasonable efforts, consistent with past practices and policies, to preserve intact its present business organization, keep available the services of its present officers and employees and preserve its relationships with customers, suppliers, distributors, licensors, licensees and others with which it has business dealings, and (d) keep its business and properties substantially intact, including its present operations, physical facilities and working conditions. In furtherance of the foregoing and subject to applicable Law, the Acquiror shall confer with Acquiree, as promptly as practicable, prior to taking any material actions or making any material management decisions with respect to the conduct of the business of the Acquiror.

Section 7.2 Restrictions on Conduct of Business

Without limiting the generality of the terms of Section 6.1 hereof, except (i) as required by the terms hereof, or (ii) to the extent that Acquiree shall otherwise consent in writing, at all times during the period commencing with the execution and delivery of this Agreement and continuing until the earlier of the termination of this Agreement pursuant to the terms hereof or the Closing, neither the Acquiror, nor the Acquiror Principal Shareholder shall do any of the following, or permit the Acquiror to do any of the following:

(a) except as required by applicable Law, waive any stock repurchase rights, accelerate, amend or change the period of exercisability of options or restricted stock, or reprice options granted under any employee, consultant or director stock plans or authorize cash payments in exchange for any options granted under any of such plans;

(b) enter into any partnership arrangements, joint development agreements or strategic alliances, other than in the Ordinary Course of Business;

(c) (i) increase the compensation or fringe benefits of, or pay any bonuses or special awards to, any present or former director, officer, stockholder or employee of the Acquiror (except for increases in salary or wages in the Ordinary Course of Business) or increase any fees to any independent contractors, (ii) grant any severance or termination pay to any present or former director, officer or employee of the Acquiror, (iii) enter into, amend or terminate any employment Contract, independent contractor agreement or collective bargaining agreement, written or oral, or (iv) establish, adopt, enter into, amend or terminate any bonus, profit sharing, incentive, severance, or other plan, agreement, program, policy, trust, fund or other arrangement that would be an employee benefit plan if it were in existence as of the date of this Agreement, except as required by applicable Law;

(d) issue, deliver, sell, authorize, pledge or otherwise encumber, or propose any of the foregoing with respect to, any shares of capital stock or any securities convertible into, or exercisable or exchangeable for, shares of capital stock of the Acquiror, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into, or exercisable or exchangeable for, shares of capital stock of the Acquiror, or enter into other Contracts or commitments of any character obligating it to issue any such shares of capital stock of the Acquiror, or securities convertible into, or exercisable or exchangeable for, shares of capital stock of the Acquiror;

(e) cause, permit or propose any amendments to any Acquiror Organizational Documents;

(f) acquire or agree to acquire by merging or consolidating with, or by purchasing any equity interest in or a portion of the assets of, or by any other manner, any business or any corporation, limited liability company, general or limited partnership, joint venture, association, business trust or other business enterprise or entity, or otherwise acquire or agree to acquire any assets other than in the Ordinary Course of Business;

(g) adopt a plan of merger, complete or partial liquidation, dissolution, consolidation, restructuring, recapitalization or other reorganization;

(h) except as required by applicable Law, adopt or amend any employee benefit plan or employee stock purchase or employee stock option plan, or enter into any employment Contract or collective bargaining agreement (other than offer letters and letter agreements entered into in the Ordinary Course of Business with employees who are terminable "at will"), pay any special bonus or special remuneration to any director or employee other than in the Ordinary Course of Business, or increase the salaries or wage rates or fringe benefits (including rights to severance or indemnification) of its officers;

(i) except in the Ordinary Course of Business, modify, amend or terminate any Contract to which the Acquiror is a party, or waive, delay the exercise of, release or assign any rights or claims thereunder;

(j) sell, lease, license, mortgage or otherwise encumber or subject to any Lien or otherwise dispose of any of its properties or assets, except in the Ordinary Course of Business;

(k) (i) incur any Indebtedness or guarantee any such Indebtedness of another Person, issue or sell any debt securities or warrants or other rights to acquire any debt securities of the Acquiror, guarantee any debt securities of another Person, enter into any "keep well" or other agreement to maintain any financial statement condition of another Person or enter into any arrangement having the economic effect of any of the foregoing, except for endorsements and guarantees for collection, short-term borrowings and lease obligations, in each case incurred in the Ordinary Course of Business, or (ii) make any loans, advances or capital contributions to, or investment in, any other Person, other than to the Acquiror;

(l) pay, discharge or satisfy any claims (including claims of stockholders), Liabilities or obligations (absolute, accrued, asserted or unasserted, contingent or otherwise), except for the payment, discharge or satisfaction of liabilities or obligations in the Ordinary Course of Business or in accordance with their terms as in effect on the date hereof, or waive, release, grant, or transfer any rights of material value or modify or change in any material respect any existing License, Contract or other document, other than in the Ordinary Course of Business;

(m) change any financial reporting or accounting principle, methods or practices used by it unless otherwise required by applicable Law or GAAP;

(n) settle or compromise any litigation (whether or not commenced prior to the date of this Agreement);

(o) (i) declare, set aside or pay any dividends on, or make any other distributions in respect of, any of its capital stock, (ii) split, combine or reclassify any of its capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock, or (iii) redeem or otherwise acquire any shares of capital stock of the Acquiror or any other securities thereof or any rights, warrants or options to acquire any such shares or other securities;

(p) enter into any transaction with any of its directors, officers, stockholders, or other Affiliates;

(q) make any capital expenditure in excess of $50,000;

(r) (i) grant any license or sublicense of any rights under or with respect to any Intellectual Property; (ii) dispose of or let lapse and Intellectual Property, or any application for the foregoing, or any license, permit or authorization to use any Intellectual Property or (iii) amend, terminate any other Contract, license or permit to which the Acquiror is a party;

(s) make, or permit to be made, without the prior written consent of Acquiree any material Tax election which would affect the Acquiror; or

(t) commit to or otherwise to take any of the actions described in this Section 6.2.

ARTICLE VIII
ADDITIONAL AGREEMENTS

Section 8.1 Access to Information

The Acquiror shall afford Acquiree its accountants, counsel and other representatives (including the Acquiree Shareholders), reasonable access, during normal business hours, to the properties, books, records and personnel of the Acquiror at any time prior to the Closing in order to enable Acquiree obtain all information concerning the business, assets and properties, results of operations and personnel of the Acquiror as Acquiree may reasonably request. No information obtained in the foregoing investigation by Acquiree pursuant to this Section 7.1 shall affect or be deemed to modify any representation or warranty contained herein or the conditions to the obligations of the Acquiror or the Acquiror Principal Shareholder to consummate the transactions contemplated hereby.

Section 8.2 Legal Requirements

The Parties shall take all reasonable actions necessary or desirable to comply promptly with all legal requirements which may be imposed on them with respect to the consummation of the transactions contemplated by this Agreement (including, without limitation, furnishing all information required in connection with approvals of or filings with any Governmental Authority, and prompt resolution of any litigation prompted hereby), and shall promptly cooperate with, and furnish information to, the other Parties to the extent necessary in connection with any such requirements imposed upon any of them in connection with the consummation of the transactions contemplated by this Agreement.

Section 8.3 Notification of Certain Matters

Acquiree shall give prompt notice to the Acquiror Principal Shareholder, and the Acquiror Principal Shareholder shall give prompt notice to the Acquiree, of the occurrence, or failure to occur, of any event, which occurrence or failure to occur would be reasonably likely to cause (i) any representation or warranty contained in this Agreement to be untrue or inaccurate at the Closing, such that the conditions set forth in Article X hereof, as the case may be, would not be satisfied or fulfilled as a result thereof, or (ii) any material failure of any Acquiree, Acquiree Shareholder, the Acquiror or the Acquiror Principal Shareholder, as the case may be, or of any officer, director, employee or agent thereof, to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it under this Agreement. Notwithstanding the foregoing, the delivery of any notice pursuant to this Section 7.3 shall not limit or otherwise affect the rights and remedies available hereunder to the Party receiving such notice.

Section 8.4 Acquisition Proposals

(a) From the date of this Agreement until the Closing Date or, if earlier, the termination of this Agreement, neither the Acquiror nor the Acquiror Principal Shareholder will, and neither the Acquiror nor the Acquiror Principal Shareholder will authorize or permit the any representative of the Acquiror or the Acquiror Principal Shareholder to, directly or indirectly: (i) solicit, initiate, knowingly encourage, induce or facilitate the making, submission or announcement of any Competing Transaction Proposal from any Person (other than Acquiree or the Acquiree Shareholders, a "**Third Party**") or take any action that could reasonably be expected to lead to a Competing Transaction Proposal, (ii) furnish any information regarding the Acquiror to any Third Party in connection with or in response to a Competing Transaction Proposal or an inquiry or indication of interest, (iii) engage in or continue any discussions or negotiations with any Third Party with respect to any Competing Transaction Proposal, (iv) approve, endorse or recommend any Competing Transaction Proposal or (v) enter into any letter of intent or similar document or any Contract contemplating or otherwise relating to any Competing Transaction Proposal.

(b) Concurrently with the execution of this Agreement, Acquiror and the Acquiror Principal Shareholder shall immediately cease and cause to be terminated any existing discussions with any Person that relate to any Competing Transaction Proposal;

ARTICLE IX
POST CLOSING COVENANTS

Section 9.1 General

In case at any time after the Closing any further action is necessary to carry out the purposes of this Agreement, each of the Parties will take such further action (including the execution and delivery of such further instruments and documents) as any other Party reasonably may request.

Section 9.2 Litigation Support

In the event and for so long as any Party actively is contesting or defending against any action, suit, proceeding, hearing, investigation, charge, complaint, claim, or demand in connection with (i) any transaction contemplated under this Agreement or (ii) any fact, situation, circumstance, status, condition, activity, practice, plan, occurrence, event, incident, action, failure to act, or transaction that existed on or prior to the Closing Date involving the Acquiror, each of the other Parties will cooperate with such Party and such Party's counsel in the contest or defense, make available any personnel under their control, and provide such testimony and access to their books and records as shall be reasonably necessary in connection with the contest or defense, all at the sole cost and expense of the contesting or defending Party.

Section 9.3 Assistance with Post-Closing SEC Reports and Inquiries

After the Closing Date, the Acquiror Principal Shareholder shall use its reasonable best efforts to provide such information available to them, including information, filings, reports, financial statements or other circumstances of the Acquiror occurring, reported or filed prior to the Closing, as may be necessary or required for the preparation of the post-Closing Date reports that the Acquiror is required to file with the SEC, or filings required to address and resolve matters as may relate to the period prior to the Closing and any SEC comments relating thereto or any SEC inquiry thereof.

Section 9.4 Public Announcements

The Acquiror shall promptly, but no later than four (4) business days following the effective date of this Agreement, issue a press release disclosing the transactions contemplated hereby. The Acquiror shall also file with the SEC a Form 8-K describing the material terms of the transactions contemplated hereby as soon as practicable following the Closing Date but in no event more than four (4) business days following the Closing Date. Prior to the Closing Date, the Parties shall consult with each other in issuing the Form 8-K, the press release and any other press releases or otherwise making public statements or filings and other communications with the SEC or any regulatory agency or stock market or trading facility with respect to the transactions contemplated hereby and no Party shall issue any such press release or otherwise make any such public statement, filings or other communications without the prior written consent of the other Parties, which consent shall not be unreasonably withheld or delayed, except that no prior consent shall be required if such disclosure is required by Law, in which case the disclosing Party shall provide the other Parties with prior notice of no less than three (3) calendar days, of such public statement, filing or other communication and shall incorporate into such public statement, filing or other communication the reasonable comments of the other Parties.

ARTICLE X
TAX MATTERS

Section 10.1 Tax Periods Ending on or before the Closing Date

. The Acquiror Principal Shareholder, at its expense, shall prepare or cause to be prepared in a manner consistent with prior practice and in accordance with applicable Law and file or cause to be filed all Tax Returns for the Acquiror for all periods ending on or prior to the Closing Date which are filed after the Closing Date. The Acquiror Principal Shareholder shall permit the Acquiree to review and comment on each such Tax Return described in the preceding sentence at least twenty (20) Business Days prior to the date such Tax Returns are required to be filed and the Acquiror Principal Shareholder shall take into account in a reasonable manner any changes to such Tax Returns as are reasonably requested by the Acquiree. The Acquiror Principal Shareholder shall be liable for and timely pay any Taxes of the Acquiror with respect to such periods. Acquiree agrees to cause the Acquiror to execute the Tax Returns and any necessary documents relating to the filing of Tax Returns for which Acquiror Principal Shareholder is responsible for preparing, which are filed after the Closing Date except to the extent that the Acquiree may be subject to any liability or penalty as a result of the execution of such Tax Returns or documents.

Section 10.2 Tax Periods Beginning Before and Ending After the Closing

. For any tax period of the Acquiror which includes the Closing Date but that does not end on the Closing Date, the Acquiree shall timely prepare and file, at the Acquiree's expense, all Tax Returns for all such periods and shall pay the Taxes due with respect to such Tax Returns. The Acquiree shall permit the Acquiror Principal Shareholder to review and comment on each such Tax Return described in the preceding sentence at least twenty (20) Business Days prior to the date such Tax Return is to be filed, and the Acquiree shall take into account in a reasonable manner any changes to such Tax Returns as are reasonably requested by the Acquiror Principal Shareholder. The Acquiror Principal Shareholder shall promptly pay to the Acquiree the excess of (1) the Taxes that are apportioned to the Acquiror Principal Shareholder under the terms of this Section 9.2, over (2) the amount of such Taxes that would have appeared on any such Tax Return that have been paid by the Acquiror or the Acquiror Principal Shareholder on or prior to the Closing Date. For purposes of Section 9.2, Acquiror Principal Shareholder shall be apportioned liability for Taxes for the period deemed to end at the close of business on the Closing Date (the "**Pre-Closing Period**") and Acquiree shall be apportioned liability for Taxes for the period deemed to begin immediately after the Pre-Closing Period (the "**Post-Closing Period**") to the greatest extent possible on the basis of the "closing of the books" method of apportionment; provided, however, in the case of Taxes (such as real estate taxes) not susceptible to such apportionment, such Tax liability shall be apportioned on the basis of the number of days elapsed in the Pre-Closing Period and Post-Closing Period.

Section 10.3 Indemnification

. The Acquiror Principal Shareholder shall be responsible for, and indemnify, defend and hold the Acquiror from and against, any and all Taxes imposed on or with respect to the Acquiror, the Acquiror's assets, operations or activities for all periods (or portions thereof) ending on or prior to the Closing Date. The Acquiror shall be responsible for, and shall indemnify, defend and hold the Acquiror Principal Shareholder harmless from and against, any and all Taxes imposed on the Acquiror for all periods (or portions thereof) beginning after the Closing Date. Whenever in accordance with this Article IX, the Acquiror shall be required to pay Taxes related to periods (or portions thereof) ending on or prior to the Closing Date or the Acquiror Principal Shareholder shall be required to pay taxes related to periods (or portions thereof) beginning after the Closing Date, such payments shall be made on the later of fifteen (15) days after requested or fifteen (15) days before the requesting Party is required to pay or cause to be paid the related Tax liability. The obligations of the Parties set forth in this Section 9.3 shall be unconditional and absolute and shall remain in effect until the expiration of the applicable Tax statute of limitations.

Section 10.4 Tax Sharing Agreements

. All tax sharing agreements or similar agreements with respect to or involving the Acquiror shall be terminated as of the open of business on the Closing Date and, after the Closing Date, the Acquiror shall not be bound thereby or have any Liability thereunder. The Acquiror Principal Shareholder and the Acquiror shall take all actions necessary to terminate such agreements at such time.

Section 10.5 Certain Taxes

. All transfer, documentary, sales, use, stamp, registration and other such Taxes and fees (including any penalties and interest) incurred in connection with this Agreement, shall be paid by the Acquiror Principal Shareholder when due, and the Acquiror Principal Shareholder will, at their expense, file all necessary Tax Returns and other documentation with respect to all such transfer, documentary, sales, use, stamp, registration and other Taxes and fees, and, if required by applicable Law, the Acquiree will, and will cause its Affiliates to, join in the execution of any such Tax Returns and other documentation.

ARTICLE XI
CONDITIONS TO CLOSING

Section 11.1 Conditions to Obligation of the Parties Generally

. The Parties shall not be obligated to consummate the transactions to be performed by each of them in connection with the Closing if, on the Closing Date, (i) any Action shall be pending or threatened before any Governmental Authority wherein an Order or charge would (A) prevent consummation of any of the transactions contemplated by this Agreement or (B) cause any of the transactions contemplated by this Agreement to be rescinded following consummation, (ii) any Law or Order which would have any of the foregoing effects shall have been enacted or promulgated by any Governmental Authority; or (iii) the Acquiree shall not have received an audit report with respect to its two most recently completed fiscal years from an independent accounting firm that is registered with the Public Company Accounting Oversight Board.

Section 11.2 Conditions to Obligation of the Acquiree Parties

. The obligations of the Acquiree and the Acquiree Shareholders to enter into and perform their respective obligations under this Agreement are subject, at the option of the Acquiree and the Acquiree Shareholders, to the fulfillment on or prior to the Closing Date of the following conditions, any one or more of which may be waived by the Acquiree and the Acquiree Shareholders in writing:

(a) The representations and warranties of the Acquiror and the Acquiror Principal Shareholder set forth in this Agreement shall be true and correct in all material respects as of the Closing Date (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date);

(b) The Acquiror and the Acquiror Principal Shareholder shall have performed and complied with all of their covenants hereunder in all material respects through the Closing, except to the extent that such covenants are qualified by terms such as “material” and “Material Adverse Effect,” in which case the Acquiror Principal Shareholder and the Acquiror shall have performed and complied with all of such covenants in all respects through the Closing;

(c) No action, suit, or proceeding shall be pending or, to the Knowledge of the Acquiror, threatened before any Governmental Authority wherein an Order or charge would (A) affect adversely the right of the Acquiree Shareholders to own the Acquiror Shares or to control the Acquiror, or (B) affect adversely the right of the Acquiror to own its assets or to operate its business (and no such Order or charge shall be in effect), nor shall any Law or Order which would have any of the foregoing effects have been enacted or promulgated by any Governmental Authority;

(d) No event, change or development shall exist or shall have occurred since the Acquiror Most Recent Fiscal Year End that has had or is reasonably likely to have a Material Adverse Effect on the Acquiror;

(e) All consents, waivers, approvals, authorizations or Orders required to be obtained, and all filings required to be made, by the Acquiror for the authorization, execution and delivery of this Agreement and the consummation by it of the transactions contemplated by this Agreement, shall have been obtained and made by the Acquiror and Acquiror shall have delivered proof of same to the Acquiree and Acquiree Shareholders;

(f) Acquiror shall have filed all reports and other documents required to be filed by it under the U.S. federal securities laws through the Closing Date;

(g) Acquiror shall have maintained its status as a company whose Common Stock is quoted on the Over-the-Counter Bulletin Board and no reason shall exist as to why such status shall not continue immediately following the Closing;

(h) Trading in the Acquiror Common Stock shall not have been suspended by the SEC or any trading market (except for any suspensions of trading of not more than one trading day solely to permit dissemination of material information regarding the Acquiror) at any time since the date of execution of this Agreement, and the Acquiror Common Stock shall have been at all times since such date listed for trading on a trading market;

(i) Acquiror shall have maintained the eligibility of the Acquiror Common Stock for clearance and settlement through DTC and no reason shall exist as to why such eligibility shall not continue immediately following the Closing;

(j) There shall not be any outstanding obligation or Liability (whether accrued, absolute, contingent, liquidated or otherwise, whether due or to become due) of the Acquiror, whether or not known to the Acquiror, as of the Closing;

(k) Acquiror shall have delivered to the Acquiree and Acquiree Shareholders a certificate, dated the Closing Date, executed by an officer of the Acquiror, certifying the satisfaction of the conditions specified in Sections 10.2(a) through 10.2(l), inclusive, relating to the Acquiror;

(l) The Acquiror Principal Shareholder shall have delivered to the Acquiree and Acquiree Shareholders a certificate, dated the Closing Date, executed by such Acquiror Principal Shareholder, certifying the satisfaction of the conditions specified in Section 10.2(a) and Section 10.2(b), inclusive, relating to such Acquiror Principal Shareholder;

(m) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders a certified copy of the Certificate of Incorporation of the Acquiror as certified by the Secretary of State (or comparable office) of the Acquiror’s jurisdiction of formation within five (5) days of the Closing Date;

(n) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders (i) a certificate evidencing the formation and good standing of the Acquiror in its jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction of formation as of a date within five (5) days of the Closing Date; and (ii) a certificate evidencing the Acquiror's qualification as a foreign corporation and good standing issued by the Secretary of State (or comparable office) of each jurisdiction in which the Acquiror conducts business and is required to so qualify, as of a date within five (5) days of the Closing Date;

(o) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders a certificate duly executed by the Secretary of the Acquiror and dated as of the Closing Date, as to (i) the resolutions as adopted by the Acquiror's board of directors, in a form reasonably acceptable to the Acquiree, approving this Agreement and the Transaction Documents to which it is a party and the transactions contemplated hereby and thereby; (ii) the Acquiror Organizational Documents, each as in effect at the Closing; and (iv) the incumbency of each authorized officer of the Acquiror signing this Agreement and any other agreement or instrument contemplated hereby to which the Acquiror is a party;

(p) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders a statement from the Acquiror's transfer agent regarding the number of issued and outstanding shares of Acquiror Common Stock immediately before the Closing;

(q) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders such pay-off letters and releases relating to Liabilities of the Acquiror as the Acquiree shall request;

(r) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders duly executed letters of resignation from all of the directors and officers of the Acquiror, effective as of the Closing;

(s) Acquiror shall have delivered to the Acquiree and the Acquiree Shareholders resolutions of the Acquiror's board of directors (i) appointing Jack V. Talley to serve as President and Chief Executive Officer; (ii) appointing Dragan Cicic to serve as Chief Operating Officer and Chief Medical officer; (iii) appointing Enza Guagenti to serve as Chief Financial Officer; and (iv) nominating Jack V. Talley as a member of the Acquiror's board of directors, effective as of the Closing. Dr. Rosemary Mazanet, David Nicholson, Sandesh Seth and Sergio Traversa will also serve as members of the Acquiror's board of directors, effective as of ten days after the filing of the Schedule 14f-1 Information Statement;

(t) Execution of the Shareholder Release by and among Acquiror and Acquiror's shareholders that have loaned money to Acquiror;

(u) All of the conditions to the closing of the Acquiree Offering, other than the condition that the Closing hereunder shall have occurred, shall have been satisfied or waived;

(v) Acquiree and the Acquiree Shareholders shall have completed their legal, accounting and business due diligence of the Acquiror and the results thereof shall be satisfactory to the Acquiree and the Acquiree Shareholders in their sole and absolute discretion; and

(w) All actions to be taken by the Acquiror and the Acquiror Principal Shareholder in connection with consummation of the transactions contemplated hereby and all certificates, opinions, instruments, and other documents required to effect the transactions contemplated hereby shall be reasonably satisfactory in form and substance to the Acquiree and the Acquiree Shareholders.

Section 11.3 Conditions to Obligation of the Acquiror Parties

. The obligations of the Acquiror and the Acquiror Principal Shareholder to enter into and perform their respective obligations under this Agreement are subject, at the option of the Acquiror and the Acquiror Principal Shareholder, to the fulfillment on or prior to the Closing Date of the following conditions, any one or more of which may be waived by the Acquiror and the Acquiror Principal Shareholder in writing:

(a) The representations and warranties of the Acquiree and the Acquire Shareholders set forth in this Agreement shall be true and correct in all material respects as of the Closing Date (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date);

(b) The Acquiree and the Acquire Shareholders shall have performed and complied with all of their covenants hereunder in all material respects through the Closing, except to the extent that such covenants are qualified by terms such as "material" and "Material Adverse Effect," in which case the Acquiree and the Acquire Shareholders shall have performed and complied with all of such covenants in all respects through the Closing;

(c) All consents, waivers, approvals, authorizations or Orders required to be obtained, and all filings required to be made, by the Acquiror for the authorization, execution and delivery of this Agreement and the consummation by it of the transactions contemplated by this Agreement, shall have been obtained and made by the Acquiree and Acquiree shall have delivered proof of same to the Acquiror and Acquiror Principal Shareholder;

(d) Acquiree shall have delivered to the Acquiror and Acquiror Principal Shareholder a certificate, dated the Closing Date, executed by an officer of the Acquiree, certifying the satisfaction of the conditions specified in Sections 10.3(a) through 10.3(c), inclusive, relating to the Acquiree;

(e) Acquiree shall have delivered to the Acquiror and the Acquiror Principal Shareholder a certificate duly executed by the Secretary of the Acquiror and dated as of the Closing Date, as to (i) the resolutions as adopted by the Acquiror's board of directors, in a form reasonably acceptable to the Acquiree, approving this Agreement and the Transaction Documents to which it is a party and the transactions contemplated hereby and thereby; (ii) the Acquiree Organizational Documents, each as in effect at the

Closing; and (iii) the incumbency of each authorized officer of the Acquiree signing this Agreement and any other agreement or instrument contemplated hereby to which the Acquiree is a party;

(f) Acquiror and the Acquiror Principal Shareholder shall have completed their legal, accounting and business due diligence of the Acquiree and the results thereof shall be satisfactory to the Acquiror and the Acquiror Principal Shareholder in their sole and absolute discretion; and

(g) All actions to be taken by the Acquiree and the Acquiree Shareholders in connection with consummation of the transactions contemplated hereby and all payments, certificates, opinions, instruments, and other documents required to effect the transactions contemplated hereby shall be reasonably satisfactory in form and substance to the Acquiror and the Acquiror Principal Shareholder.

ARTICLE XII
TERMINATION

Section 12.1 Grounds for Termination

. Anything herein or elsewhere to the contrary notwithstanding, this Agreement may be terminated and the transactions contemplated hereby may be abandoned at any time prior to the Closing Date:

(a) by the mutual written agreement of the Parties;

(b) by Acquiree and the Acquiree Shareholders (by written notice of termination from Acquiree and the Acquiree Shareholders to the Acquiror and the Acquiror Principal Shareholder, in which reference is made to this subsection) if the Closing has not occurred on or prior to the Termination Date, unless the failure of the Closing to have occurred is attributable to a failure on the part of Acquiree or the Acquiree Shareholders to perform any material obligation to be performed by Acquiree or the Acquiree Shareholders pursuant to this Agreement at or prior to the Closing;

(c) by the Acquiror (by written notice of termination from the Acquiror to the Acquiree and the Acquiree Shareholders, in which reference is made to this subsection) if the Closing has not occurred on or prior to the Termination Date, unless the failure of the Closing to have occurred is attributable to a failure on the part of the Acquiror Principal Shareholder to perform any material obligation required to be performed by any such Acquiror Principal Shareholder pursuant to this Agreement at or prior to the Closing;

(d) by the Acquiror or the Acquiree (by written notice of termination from such Party to the other Parties) if a Governmental Authority of competent jurisdiction shall have issued a final non-appealable Order, or shall have taken any other action having the effect of, permanently restraining, enjoining or otherwise prohibiting the consummation of the transactions contemplated hereby; provided, however, that the right to terminate this Agreement under this Section 11.3(d) shall not be available to a Party if such Order was primarily due to the failure of such Party to perform any of its obligations under this Agreement;

(e) by the Acquiror, Acquiree or the Acquiree Shareholders (by written notice of termination from such Party to the other Parties) if any event shall occur after the date hereof that shall have made it impossible to satisfy a condition precedent to the terminating Party's obligations to perform its obligations hereunder, unless the occurrence of such event shall be due to the failure of the terminating Party to perform or comply with any of the agreements, covenants or conditions hereof to be performed or complied with by such Party at or prior to the Closing;

(f) by Acquiree or the Acquiree Shareholders (by written notice of termination from Acquiree to the Acquiror Principal Shareholder, in which reference is made to this subsection) if, since the date of this Agreement, there shall have occurred any Material Adverse Effect on the Acquiror, or there shall have occurred any event or circumstance that, in combination with any other events or circumstances, could reasonably be expected to have, a Material Adverse Effect with respect to the Acquiror;

(g) by the Acquiree (by written notice of termination from the Acquiree to the Acquiror and the Acquiror Principal Shareholder, in which reference is made to the specific provision(s) of this subsection giving rise to the right of termination) if (i) any of Acquiror's or the Acquiror Shareholder's representations and warranties shall have been inaccurate as of the date of this Agreement or as of a date subsequent to the date of this Agreement (as if made on such subsequent date), such that the condition set forth in Section 10.3(a) would not be satisfied and such inaccuracy has not been cured by Acquiror or the Acquiror Principal Shareholder within five (5) Business Days after its receipt of written notice thereof and remains uncured at the time notice of termination is given, (ii) any of the Acquiror's or Acquiror Principal Shareholder's covenants contained in this Agreement shall have been breached, such that the condition set forth in Section 10.3(b) would not be satisfied, or (iii) any Action shall be initiated, threatened or pending which could reasonably be expected to materially and adversely affect the Acquiror or Acquiree (including, without limitation, any such Action relating to any alleged violation of, or non-compliance with, any applicable Law or any allegation of fraud or intentional misrepresentation); or

(h) by the Acquiror and the Acquiror Principal Shareholder (by written notice of termination from the Acquiror to the Acquiree and the Acquiree Shareholders, in which reference is made to the specific provision(s) of this subsection giving rise to the right of termination) if (i) any of Acquiree's or the Acquiree Shareholder's representations and warranties shall have been inaccurate as of the date of this Agreement or as of a date subsequent to the date of this Agreement (as if made on such subsequent date), such that the condition set forth in Section 10.2(a) would not be satisfied and such inaccuracy has not been cured by Acquiree or the Acquiree Shareholders within five (5) Business Days after its receipt of written notice thereof and remains uncured at the time notice of termination is given, or (ii) any of the Acquiree's or Acquiree Shareholder's covenants contained in this Agreement shall have been breached, such that the condition set forth in Section 10.2(b) would not be satisfied.

Section 12.2 Procedure and Effect of Termination

. In the event of the termination of this Agreement by the Acquiror Principal Shareholder or Acquiree pursuant to Section 11.1 hereof, written notice thereof shall forthwith be given to the other Party. If this Agreement is terminated as provided herein (a) each Party will redeliver all documents, work papers and other material of any other Party relating to the transactions contemplated hereby, whether so obtained before or after the execution hereof, to the Party furnishing the same; provided, that each Party may retain one copy of all such documents for archival purposes in the custody of its outside counsel and (b) all filings, applications and other submission made by any Party to any Person, including any Governmental Authority, in connection with the transactions contemplated hereby shall, to the extent practicable, be withdrawn by such Party from such Person.

Section 12.3 Effect of Termination

. If this Agreement is terminated pursuant to Section 10.1 hereof, this Agreement shall become void and of no further force and effect, except for the provisions of (i) Article XII, (iii) Sections 3.6, 4.8 and 5.10 hereof relating to brokers' fees or commissions, (iv) Section 11.2 and this Section 11.3.

ARTICLE XIII
SURVIVAL; INDEMNIFICATION

Section 13.1 Survival

. All representations, warranties, covenants, and obligations in this Agreement shall survive the Closing. The right to indemnification, payment of damages or other remedy based on such representations, warranties, covenants, and obligations will not be affected by any investigation conducted with respect to, or any knowledge acquired (or capable of being acquired) at any time, whether before or after the execution and delivery of this Agreement, with respect to the accuracy or inaccuracy of or compliance with, any such representation, warranty, covenant, or obligation. The waiver of any condition based on the accuracy of any representation or warranty, or on the performance of or compliance with any covenant or obligation, will not affect the right to indemnification, payment of damages, or other remedy based on such representations, warranties, covenants, and obligations.

Section 13.2 Indemnification by the Acquiror Principal Shareholder

. From and after the execution of this Agreement, the Acquiror Principal Shareholder shall indemnify and hold harmless the Acquiree Indemnified Parties, from and against any all costs or expenses (including attorneys' fees), judgments, fines, losses, claims, damages, liabilities and amounts paid in settlement (collectively, "**Damages**") arising, directly or indirectly, from or in connection with: (a) any breach (or alleged breach) of any representation or warranty made by the Acquiror Principal Shareholder or the Acquiror in this Agreement or any Transaction Document or in any certificate delivered by the Acquiror Principal Shareholder or the Acquiror pursuant to this Agreement; or (b) any breach (or alleged breach) by the Acquiror Principal Shareholder or the Acquiror of any covenant or obligation of the Acquiror Principal Shareholder or the Acquiror in this Agreement or any Transaction Document required to be performed by the Acquiror Principal Shareholder or the Acquiror on or prior to the Closing Date or by the Acquiror Principal Shareholder after the Closing Date.

Section 13.3 Matters Involving Third Parties

.

(a) If any third party shall notify any Acquiree Indemnified Parties (the "**Indemnified Party**") with respect to any matter (a "**Third Party Claim**") which may give rise to a claim for indemnification against the Acquiror Principal Shareholder (the "**Indemnifying Party**") under this Article XII, then the Indemnified Party shall promptly notify each Indemnifying Party thereof in writing; provided, however, that no delay on the part of the Indemnified Party in notifying any Indemnifying Party shall relieve the Indemnifying Party from any obligation hereunder unless (and then solely to the extent) the Indemnifying Party is thereby prejudiced.

(b) Any Indemnifying Party will have the right to defend the Indemnified Party against the Third Party Claim with counsel of its choice reasonably satisfactory to the Indemnified Party so long as (A) the Indemnifying Party notifies the Indemnified Party in writing within fifteen (15) days after the Indemnified Party has given notice of the Third Party Claim that the Indemnifying Party will indemnify the Indemnified Party from and against the entirety of any Damages the Indemnified Party may suffer resulting from, arising out of, relating to, in the nature of, or caused by the Third Party Claim, (B) the Indemnifying Party provides the Indemnified Party with evidence acceptable to the Indemnified Party that the Indemnifying Party will have the financial resources to defend against the Third Party Claim and fulfill its indemnification obligations hereunder, (C) the Third Party Claim involves only money damages and does not seek an injunction or other equitable relief, (D) settlement of, or an adverse judgment with respect to, the Third Party Claim is not, in the good faith judgment of the Indemnified Party, likely to establish a precedential custom or practice adverse to the continuing business interests of the Indemnified Party, and (E) the Indemnifying Party conducts the defense of the Third Party Claim actively and diligently.

(c) So long as the Indemnifying Party is conducting the defense of the Third Party Claim in accordance with Section 12.3(b) above, (A) the Indemnified Party may retain separate co-counsel at its sole cost and expense and participate in the defense of the Third Party Claim, (B) the Indemnified Party will not consent to the entry of any judgment or enter into any settlement with respect to the Third Party Claim without the prior written consent of the Indemnifying Party (not to be withheld unreasonably), and (C) the Indemnifying Party will not consent to the entry of any judgment or enter into any settlement with respect to the Third Party Claim without the prior written consent of the Indemnified Party (not to be withheld unreasonably).

(d) In the event any condition in Section 12.3(b) above is or becomes unsatisfied, however, (A) the Indemnified Party may defend against, and consent to the entry of any judgment or enter into any settlement with respect to, the Third Party Claim in any manner it reasonably may deem appropriate (and the Indemnified Party need not consult with, or obtain any consent from, any Indemnifying Party in connection therewith), (B) the Indemnifying Parties will reimburse the Indemnified Party

promptly and periodically for the costs of defending against the Third Party Claim (including reasonable attorneys' fees and expenses), and (C) the Indemnifying Parties will remain responsible for any Damages the Indemnified Party may suffer resulting from, arising out of, relating to, in the nature of, or caused by the Third Party Claim to the fullest extent provided in this Article XI.

Section 13.4 Exclusive Remedy

. The Parties acknowledge and agree that the indemnification provisions in this Article XII and in Article IX hereof shall be the exclusive remedies of the Parties with respect to the transactions contemplated by this Agreement, other than for fraud and willful misconduct. Each Acquiror Principal Shareholder hereby agrees that such Acquiror Principal Shareholder will not make any claim for indemnification against the Acquiror by reason of the fact that such Acquiror Principal Shareholder was a director, officer, employee, or agent of the Acquiror or was serving at the request of the Acquiror as a partner, trustee, director, officer, employee, or agent of another entity (whether such claim is for judgments, damages, penalties, fines, costs, amounts paid in settlement, losses, expenses, or otherwise and whether such claim is pursuant to any statute, charter document, bylaw, agreement, or otherwise) with respect to any action, suit, proceeding, complaint, claim, or demand brought by the Acquiree against the Acquiror Principal Shareholder (whether such action, suit, proceeding, complaint, claim, or demand is pursuant to this Agreement, applicable Law, or otherwise).

ARTICLE XIV
MISCELLANEOUS PROVISIONS

Section 14.1 Expenses

. Except as otherwise expressly provided in this Agreement, each Party will bear its respective expenses incurred in connection with the preparation, execution, and performance of this Agreement and the transactions contemplated by this Agreement, including all fees and expenses of agents, representatives, counsel, and accountants. In the event of termination of this Agreement, the obligation of each Party to pay its own expenses will be subject to any rights of such Party arising from a breach of this Agreement by another Party.

Section 14.2 Confidentiality

.

(a) The Parties will maintain in confidence, and will cause their respective directors, officers, employees, agents, and advisors to maintain in confidence, any written, oral, or other information obtained in confidence from another Person in connection with this Agreement or the transactions contemplated by this Agreement, unless (a) such information is already known to such Party or to others not bound by a duty of confidentiality or such information becomes publicly available through no fault of such Party, (b) the use of such information is necessary or appropriate in making any required filing with the SEC, or obtaining any consent or approval required for the consummation of the transactions contemplated by this Agreement, or (c) the furnishing or use of such information is required by or necessary or appropriate in connection with legal proceedings.

(b) In the event that any Party is required to disclose any information of another Person pursuant to clause (b) or (c) of Section 13.2(a) above, the Party requested or required to make the disclosure (the "disclosing party") shall provide the Person that provided such information (the "providing party") with prompt notice of any such requirement so that the providing party may seek a protective Order or other appropriate remedy and/or waive compliance with the provisions of this Section 13.2. If, in the absence of a protective Order or other remedy or the receipt of a waiver by the providing party, the disclosing party is nonetheless, in the opinion of counsel, legally compelled to disclose the information of the providing party, the disclosing party may, without liability hereunder, disclose only that portion of the providing party's information which such counsel advises is legally required to be disclosed, provided that the disclosing party exercises its reasonable efforts to preserve the confidentiality of the providing party's information, including, without limitation, by cooperating with the providing party to obtain an appropriate protective Order or other relief assurance that confidential treatment will be accorded the providing party's information.

(c) If the transactions contemplated by this Agreement are not consummated, each Party will return or destroy all of such written information each party has regarding the other Parties.

Section 14.3 Notices

. All notices, demands, consents, requests, instructions and other communications to be given or delivered or permitted under or by reason of the provisions of this Agreement or in connection with the transactions contemplated hereby shall be in writing and shall be deemed to be delivered and received by the intended recipient as follows: (i) if personally delivered, on the Business Day of such delivery (as evidenced by the receipt of the personal delivery service), (ii) if mailed certified or registered mail return receipt requested, two (2) Business Days after being mailed, (iii) if delivered by overnight courier (with all charges having been prepaid), on the Business Day of such delivery (as evidenced by the receipt of the overnight courier service of recognized standing), or (iv) if delivered by facsimile transmission or other electronic means, including email, on the Business Day of such delivery if sent by 6:00 p.m. in the time zone of the recipient, or if sent after that time, on the next succeeding Business Day. If any notice, demand, consent, request, instruction or other communication cannot be delivered because of a changed address of which no notice was given (in accordance with this Section 13.4), or the refusal to accept same, the notice, demand, consent, request, instruction or other communication shall be deemed received on the second business day the notice is sent (as evidenced by a sworn affidavit of the sender). All such notices, demands, consents, requests, instructions and other communications will be sent to the following addresses or facsimile numbers as applicable:

If to Acquiror or the Acquiror Principal Shareholder, to:	Cactus Ventures, Inc. 123 W. Nye Lane, Suite 129 Carson City, NV 89706 Attention: [_____] Telephone No.: (831) 770-0217 Facsimile No.:
With copies to:	Cletha Walstrand Attorney at Law 1322 Pachua Ivins, UT 84378 Telephone No.: (435) 688-7317 Facsimile No.: (435) 688-7318
If to the Acquiree, to:	Actinium Pharmaceuticals, Inc. 501 Fifth Avenue, 3rd Floor New York, NY 10017 Attention: Jack Talley Telephone No.: 212) 300-2131 Facsimile No.: 9800) 559-6927
With copies to:	Anslow & Jaclin, LLP 195 Route 9 South, Second Floor Manalapan, New Jersey 07726 Attention: Richard I. Anslow, Esq. Telephone No.: 732-409-1212 Facsimile No.: 732-577-1188
If to the Acquiree Shareholders, to:	The applicable address set forth on Schedule I hereto.

or such other addresses as shall be furnished in writing by any Party in the manner for giving notices hereunder.

Section 14.4 Further Assurances. The Parties agree (a) to furnish upon request to each other such further information, (b) to execute and deliver to each other such other documents, and (c) to do such other acts and things, all as the other Parties may reasonably request for the purpose of carrying out the intent of this Agreement and the documents referred to in this Agreement.

Section 14.5 Waiver. The rights and remedies of the Parties are cumulative and not alternative. Neither the failure nor any delay by any Party in exercising any right, power, or privilege under this Agreement or the documents referred to in this Agreement will operate as a waiver of such right, power, or privilege, and no single or partial exercise of any such right, power, or privilege will preclude any other or further exercise of such right, power, or privilege or the exercise of any other right, power, or privilege. To the maximum extent permitted by applicable Law, (a) no claim or right arising out of this Agreement or the documents referred to in this Agreement can be discharged by one Party, in whole or in part, by a waiver or renunciation of the claim or right unless in writing signed by the other Parties; (b) no waiver that may be given by a Party will be applicable except in the specific instance for which it is given; and (c) no notice to or demand on one Party will be deemed to be a waiver of any obligation of such Party or of the right of the Party giving such notice or demand to take further action without notice or demand as provided in this Agreement or the documents referred to in this Agreement.

Section 14.6 Entire Agreement and Modification. This Agreement supersedes all prior agreements between the Parties with respect to its subject matter and constitutes (along with the documents referred to in this Agreement) a complete and exclusive statement of the terms of the agreement between the Parties with respect to its subject matter. This Agreement may not be amended except by a written agreement executed by the Party against whom the enforcement of such amendment is sought.

Section 14.7 Assignments, Successors, and No Third-Party Rights. No Party may assign any of its rights under this Agreement without the prior consent of the other Parties. Subject to the preceding sentence, this Agreement will apply to, be binding in all respects upon, and inure to the benefit of and be enforceable by the respective successors and permitted assigns of the Parties. Except as set forth in Article XII hereof, nothing expressed or referred to in this Agreement will be construed to give any Person other than the Parties any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement.

Section 14.8 Severability

. If any provision of this Agreement is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement will remain in full force and effect. Any provision of this Agreement held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

Section 14.9 Section Headings

. The headings of Articles and Sections in this Agreement are provided for convenience only and will not affect its construction or interpretation. All references to "Article" or "Articles" or "Section" or "Sections" refer to the corresponding Article or Articles or Section or Sections of this Agreement, unless the context indicates otherwise.

Section 14.10 Construction

. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement. Any reference to any federal, state, local, or foreign statute or Law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise. Unless otherwise expressly provided, the word "including" shall mean including without limitation. The Parties intend that each representation, warranty, and covenant contained herein shall have independent significance. If any Party has breached any representation, warranty, or covenant contained herein in any respect, the fact that there exists another representation, warranty, or covenant relating to the same subject matter (regardless of the relative levels of specificity) which the Party has not breached shall not detract from or mitigate the fact that the Party is in breach of such representation, warranty, or covenant. All words used in this Agreement will be construed to be of such gender or number as the circumstances require.

Section 14.11 Counterparts

. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the Party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.

Section 14.12 Specific Performance

. Each of the Parties acknowledges and agrees that the other Parties would be damaged irreparably in the event any of the provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached. Accordingly, each of the Parties agrees that the other Parties shall be entitled to an injunction or injunctions to prevent breaches of the provisions of this Agreement and to enforce specifically this Agreement and the terms and provisions hereof in any action instituted in any court of the U.S. or any state thereof having jurisdiction over the Parties and the matter (subject to the provisions set forth in Section 13.13 below), in addition to any other remedy to which they may be entitled, at Law or in equity.

Section 14.13 Governing Law; Submission to Jurisdiction

. This Agreement shall be governed by and construed in accordance with the Laws of the State of New York without regard to conflicts of Laws principles. Each of the Parties submits to the jurisdiction of any state or federal court sitting in the State of New York, in any action or proceeding arising out of or relating to this Agreement and agrees that all claims in respect of the action or proceeding may be heard and determined in any such court. Each of the Parties waives any defense of inconvenient forum to the maintenance of any action or proceeding so brought and waives any bond, surety, or other security that might be required of any other Party with respect thereto. Any Party may make service on any other Party by sending or delivering a copy of the process to the Party to be served at the address and in the manner provided for the giving of notices in Section 13.3 above. Nothing in this Section 13.13, however, shall affect the right of any Party to serve legal process in any other manner permitted by Law or at equity. Each Party agrees that a final judgment in any action or proceeding so brought shall be conclusive and may be enforced by suit on the judgment or in any other manner provided by Law or at equity.

Section 14.14 Waiver of Jury Trial

. EACH OF THE PARTIES HEREBY IRREVOCABLY WANES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

[Signatures follow on next page]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed as of the date first above written.

ACQUIROR:

CACTUS VENTURES, INC.

By: /s/ Diane Button
Name: Diane S. Button
Title: Chief Executive Officer and Chief Financial Officer

ACQUIROR PRINCIPAL SHAREHOLDER:

/s/ Diane Button
DIANE S. BUTTON

[Signatures continue on next page]

[Signature Page to Share Exchange Agreement]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed as of the date first above written.

ACQUIREE:

ACTINIUM PHARMACEUTICALS. INC.

By: /S/ Jack Talley
Name: Jack V. Talley
Title: President

[Signature Page to Share Exchange Agreement]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed as of the date first above written.

ACQUIREE SHAREHOLDERS:

IF AN INDIVIDUAL:

_____

Name:

IF AN ENTITY:

NAME OF ENTITY:
[ ]

By: _____

Name:

Title:

[Signature Page to Share Exchange Agreement]

SCHEDULE I

Acquiree Shareholder	Total Acquiree Shares Held Prior to the Closing	Acquiror Common Shares to be Issued at the Closing
Total		

SCHEDULE II

Acquiree Shareholder	Total Acquiree Options and Warrants Held Prior to the Closing	Acquiror Options and Warrants to be Issued at the Closing
Total		

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "ACTINIUM PHARMACEUTICALS, INC.", FILED IN THIS OFFICE ON THE TWENTY-FOURTH DAY OF OCTOBER, A.D. 2012, AT 7:38 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

Jeffrey W. Bullock, Secretary of State

3229186 8100

AUTHENTICATION: 9944230

121163909

DATE: 10-25-12

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 07:49 PM 10/24/2012
FILED 07:38 PM 10/24/2012
SRV 121163909 - 3229186 FILE

FIFTH RESTATED

CERTIFICATE OF INCORPORATION

OF

ACTINIUM PHARMACEUTICALS, INC.

ACTINIUM PHARMACEUTICALS, INC. (the "*Corporation*"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "*DGCL*"), hereby certifies as follows:

FIRST: The name of the Corporation is Actinium Pharmaceuticals, Inc. A Certificate of Incorporation of the Corporation originally was filed by the Corporation with the Secretary of State of Delaware on June 13, 2000, restated on June 6, 2001, further amended on June 29, 2004, further amended and restated on October 24, 2006, further amended and restated on March 28, 2008, and further amended and restated on October 3, 2011 (collectively, the "*Certificate of Incorporation*").

SECOND: This Fifth Restated Certificate of Incorporation restates and integrates and amends the Certificate of Incorporation of the Corporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the DGCL, and was approved at the Corporation's annual meeting by vote of the stockholders of the Corporation, notice of such meeting given in accordance with the provisions of Section 222 of the DGCL.

THIRD: The text of the Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

The name of the corporation is Actinium Pharmaceuticals, Inc. (the "*Corporation*").

ARTICLE II

The address of the Corporation's registered office is 1209 Orange Street in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

A. Authorization. The aggregate number of shares of all classes of stock which the Corporation shall have authority to issue is 325,000,000, consisting of: (i) 283,463,176shares of common stock, par value $0.01 per share (the "*Common Stock*"), and (ii) 41,536,824 shares of preferred stock, par value $0.01 per share (the "*Preferred Stock*"). The Preferred Stock authorized by this Certificate of Incorporation may be issued from time to time in one or more series. The Board of Directors is authorized, subject to the affirmative vote or written approval of the Applicable Percentage of the Series E Preferred Stock outstanding and the limitations prescribed by law and to the extent not inconsistent with, or otherwise in contravention of, the provisions of this Article IV (including, without limitation, Section C.6(a)of this Article IV), to authorize the issuance of one or more series of Preferred Stock, any or all of which series may have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in this Certificate of Incorporation or of any amendment hereto, or in the resolution or resolutions providing for the issue of such Preferred Stock adopted by the Board of Directors pursuant to authority expressly vested in it by the provisions of this Certificate of Incorporation. The Common Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series C-1 Preferred Stock, the Series C-2 Preferred Stock, the Series C-3 Preferred Stock, the Series C-4 Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock shall have the voting powers, designations, preferences, rights, qualifications, limitations and restrictions set forth in Sections B and C, respectively, of this Article IV. Capitalized terms used and not otherwise defined in this Article IV shall have the respective meanings ascribed to such terms in Section D of this Article IV.

B. Common Stock.

1. General. Except as required by law or as provided in this Certificate, all shares of Common Stock shall be identical in all respects and shall entitle the holders thereof to the same rights and privileges, subject to the same qualifications, limitations and restrictions.

2. Dividends and Distributions. Subject to the provisions of this Article IV, including Sections C.2 and C.6 of this Article IV, the holders of shares of Common Stock shall be entitled to receive such dividends and distributions, payable in cash or otherwise, as may be declared thereon by the Board of Directors of the Corporation (the "*Board*") from time to time out of assets or funds of the Corporation legally available therefor. The holders of shares of Common Stock shall be entitled to share equally, on a per share basis, in such dividends or distributions, subject to the limitations described below.

3. Voting. Each holder of Common Stock shall be entitled to vote on each matter (a) expressly required by the DGCL or (b) otherwise submitted to a vote of the stockholders of the Corporation, including the election of directors, except for matters subject to

a separate class vote by one or more classes and/or series of capital stock of the Corporation other than Common Stock to the extent such separate class vote is required by the DGCL or this Certificate. Each holder of shares of Common Stock shall be entitled to one vote per share of Common Stock held by such holder on each matter to be voted on by such stock.

4. Liquidation. The holders of all Common Stock shall be entitled to liquidation distributions, if any, pursuant to Section C.3.1(c) of this Article IV.

C. Preferred Stock.

1. Designation. A total of (a) 1,000,000 shares of Preferred Stock shall be designated as Series A Convertible Participating Preferred Stock (the "*Series A Preferred Stock*"), (b) 4,711,247shares of Preferred Stock shall be designated as Series B Preferred Stock (the "*Series B Preferred Stock*"), (c) 800,000 shares of Preferred Stock shall be designated as Series C-1 Preferred Stock (the "*Series C-1 Preferred Stock*"), 666,667 shares of Preferred Stock shall be designated as Series C-2 Preferred Stock (the "*Series C-2 Preferred Stock*"), 502,604 shares of Preferred Stock shall be designated as Series C-3 Preferred Stock (the "*Series C-3 Preferred Stock*"), and 4,250,000 shares of Preferred Stock shall be designated as Series C-4 Preferred Stock (the "*Series C-4 Preferred Stock*" and, collectively with the Series C-1 Preferred Stock, the Series C-2 Preferred Stock and the Series C-3 Preferred Stock, the "*Series C Preferred Stock*"), (d) 3,000,000 shares of Preferred Stock shall be designated as Series D Preferred Stock (the "*Series D Preferred Stock*"), and 26,606,306 shares of Preferred Stock shall be designated as Series E Preferred Stock (the "*Series E Preferred Stock*").

2. Dividends

2.1 Series E Preferred Stock Dividends. The holders of Series E Preferred Stock shall be entitled to receive, out of funds legally available therefore and prior and in preference to any declaration or payment of any dividend on any other class or series of the Corporation's capital stock, cumulative dividends on such shares of Series E Preferred Stock(the "*Series E Preferred Dividend*"), payable in cash, when, as and if declared by the Board, at a rate per share equal to seven percent (7%) per annum of the Applicable Per Share Stated Value for such share of Series E Preferred Stock, calculated on the basis of actual days elapsed over a 365-day year. The Series E Preferred Dividends shall accrue and compound on an annual basis, commencing on the Series E Issue Date, whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. The Corporation shall not declare, pay, make or Issue a dividend or other distribution with respect to any other class or series of the Corporation's capital stock (other than a dividend payable in shares of Common Stock in connection with an Extraordinary Stock Event) unless and until all accrued and unpaid Series E Preferred Dividends have been paid.

2.2 Series B and Series D Preferred Stock Dividends. The holders of Series B Preferred Stock and the holders of Series D Preferred Stock shall be entitled to receive, out of funds legally available therefore and prior and in preference to any declaration or payment of any dividend on any other class or series of the Corporation's capital stock other than the Series E Preferred Stock, cumulative dividends on such shares of Series B Preferred Stock and Series D Preferred Stock, *pari passu*,(the "*Series B and D Preferred Dividend*"), payable in cash,

when, as and if declared by the Board, at a rate per share equal to seven percent (7%) per annum of the Applicable Per Share Stated Value for such share of Series B Preferred Stock or for such of Series D Preferred Stock, as the case may be calculated on the basis of actual days elapsed over a 365-day year. The Series B and D Preferred Dividends shall accrue and compound on an annual basis, commencing on the Series B Issue Date for the Series B Preferred Stock, and commencing on the Series D Issue Date for the Series D Preferred Stock, whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. The Corporation shall not declare, pay, make or Issue a dividend or other distribution with respect to any other class or series of the Corporation's capital stock, other than dividends on the Series E Preferred Stock (and other than a dividend payable in shares of Common Stock in connection with an Extraordinary Stock Event), unless and until all accrued and unpaid Series B and D Preferred Dividends have been paid.

2.3 Participating Dividends. In the event the Corporation shall pay, make or Issue all dividends on the Series E Preferred Stock and on the Series B Preferred Stock and on the Series D Preferred Stock as specified in Sections C.2.1 and C.2.2, and shall pay, make or Issue an additional dividend or other distribution with respect to the Common Stock payable in cash, securities of the Corporation (other than shares of Common Stock in connection with an Extraordinary Stock Event), or other assets, then, and in each such event, the holders of Series A Preferred Stock and Series C Preferred Stock shall receive, at the same time such distribution is made with respect to the Common Stock, the cash, securities or such other assets of the Corporation which such holders would have received had their shares of Preferred Stock been converted into Common Stock, in the manner set forth in Section C.5.1 of this Article IV, immediately prior to the record date for determining holders of Common Stock entitled to receive such distribution.

3. Liquidation, Dissolution and Winding Up.

3.1 Treatment at Liquidation, Dissolution or Winding Up.

(a) Series E Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary (as applicable), or in the event of its insolvency, whether under the DGCL, federal bankruptcy laws or other applicable federal or state laws (a "*Liquidation*"), the holders of outstanding shares of the Series E Preferred Stock shall be entitled to be paid out of the assets of the Corporation available for distribution to holders of the Corporation's capital stock of all classes, whether such assets are capital, surplus or earnings ("*Available Assets*"), before any distribution or payment is made to any holders of Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or any class or series of the Corporation's capital stock which is, with respect to the Senior Preferred Stock, Junior Stock, an amount per share of Series E Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series E Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series E Preferred Stock would receive with respect to such share of Series E Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series E Liquidation Preference*").

If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Series E Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(b) Series A, Series B and Series D Liquidation Preferences. After payment in full of the Series E Liquidation Preference, the holders of outstanding shares of the Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock (together, the "*Senior Preferred Stock*") shall be entitled to be paid out of the Available Assets, *pari passu*, before any distribution or payment is made to any holders of Common Stock, Series C Preferred Stock or any class or series of the Corporation's capital stock which is, with respect to the Senior Preferred Stock, Junior Stock as follows:

(A) in the case of the Series A Preferred Stock, an amount per share of Series A Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series A Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series A Preferred Stock would receive with respect to such share of Series A Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series A Liquidation Preference*"); and

(B) in the case of the Series B Preferred Stock, an amount per share of Series B Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series B Preferred Stock, plus (2) accrued and unpaid dividends thereon, plus (3) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series B Preferred Stock would receive with respect to such share of Series B Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series B Liquidation Preference*").

(C) in the case of the Series D Preferred Stock, an amount per share of Series D Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series D Preferred Stock, plus (2) accrued and unpaid dividends thereon, plus (3)declared and unpaid dividends, if any, thereon, and (II) such amount per share that the holders of the Series D Preferred Stock would receive with respect to such share of Series D Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series D Liquidation Preference*", and together with the Series A Liquidation Preference and the Series B Liquidation Preference, the "*Senior Liquidation Preference*").

(D) The Series A Liquidation Preference, the Series B Liquidation Preference and the Series D Liquidation Preference shall rank in Liquidation *pari passu* with one another based upon the amount of the Senior Liquidation Preference payable to each such series of Senior Preferred Stock. If, upon Liquidation, the Available Assets shall be

insufficient to pay the holders of Senior Preferred Stock the full amounts to which such holders otherwise would be entitled under Section C.3.1(a) of this Article IV, then the holders of Senior Preferred Stock shall share in any distribution of Available Assets pro rata in proportion to the Senior Liquidation Preference amounts which would otherwise be payable upon such Liquidation with respect to the outstanding shares of the Senior Preferred Stock held by such holders if all Senior Liquidation Preference amounts with respect to such shares were paid in full.

(E) If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Senior Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(c) Series C Liquidation Preference.

(i) After payment in full of the Series E Liquidation Preference and the Senior Liquidation Preference, the holders of outstanding shares of Series C Preferred Stock shall be entitled to be paid out of any remaining Available Assets before any distribution or payment is made to any holders of Common Stock or any class or series of the Corporation's capital stock which is, with respect to the Series C Preferred Stock, Junior Stock as follows:

(A) in the case of the Series C-1 Preferred Stock, an amount per share of Series C-1 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-1 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-1 Preferred Stock would receive with respect to such share of Series C-1 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-1 Liquidation Preference*");

(B) in the case of the Series C-2 Preferred Stock, an amount per share of Series C-2 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-2 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-2 Preferred Stock would receive with respect to such share of Series C-2 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-2 Liquidation Preference*");

(C) in the case of the Series C-3 Preferred Stock, an amount per share of Series C-3 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-3 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-3 Preferred Stock would receive with respect to such share of Series C-3 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this

Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-3 Liquidation Preference*"); and

(D) in the case of the Series C-4 Preferred Stock, an amount per share of Series C-4 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-4 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-4 Preferred Stock would receive with respect to such share of Series C-4 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-4 Liquidation Preference*," and collectively with the Series C-1 Liquidation Preference, the Series C-2 Liquidation Preference and the Series C-3 Liquidation Preference, the "*Series C Liquidation Preference*").

(ii) The Series C-1 Liquidation Preference, the Series C-2 Liquidation Preference, the Series C-3 Liquidation Preference, and the C-4 Liquidation Preference shall rank in Liquidation *pari passu* with one another based upon the amount of the Series C Liquidation Preference payable to each such series of Series C Preferred Stock. If, upon Liquidation, the Available Assets shall be insufficient to pay the holders of Series C Preferred Stock the full amounts to which such holders otherwise would be entitled under Section C.3.1(c)(i) of this Article IV, then the holders of Series C Preferred Stock shall share in any distribution of Available Assets pro rata in proportion to the Series C Liquidation Preference amounts which would otherwise be payable upon such Liquidation with respect to the outstanding shares of the Series C Preferred Stock held by such holders if all Series C Liquidation Preference amounts with respect to such shares were paid in full.

If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Series C Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(d) Distributions on Common Stock. After payment in full of the Series E Liquidation Preference, the Senior Liquidation Preference and the Series C Liquidation Preference to all holders of Preferred Stock pursuant to Sections C.3.1.(a), (b) and (c) of this Article IV, and payment in full on any class or series of the Corporation's capital stock that is entitled to payment prior to the holders of Common Stock, the remaining Available Assets, if any, shall be distributed among the holders of Common Stock in proportion to the number of shares of Common Stock then held by holders of Common Stock.

3.2 Treatment of Acquisition Transaction as a Liquidation.

(a) Transaction Payment. At least twenty (20) calendar days prior to the consummation of an Acquisition Transaction, the Corporation or, if the Corporation is not a party to such Acquisition Transaction, the holders of shares of capital stock of the Corporation that are parties to such Acquisition Transaction, shall provide the holders of the shares of Preferred Stock written notice of such Acquisition Transaction (the

"*Event Notice*"). The Event Notice shall contain all of the material terms and conditions of the Acquisition Transaction and shall include a copy of the final or then most recent draft of the definitive documentation governing such Acquisition Transaction and the Board's good faith determination of the value of any securities or property other than cash, if any, to be received as consideration in such Acquisition Transaction. The Corporation or, if the Corporation is not a party to such Acquisition Transaction, the holders of the shares of the Corporation's capital stock that are parties to such Acquisition Transaction shall also promptly provide to the holders of any particular series of Preferred Stock any additional information concerning (i) the terms and conditions of such Acquisition Transaction, (ii) the value of the Corporation's assets or securities involved in such Acquisition Transaction and (iii) the value of any securities or property other than cash to be received as consideration in such Acquisition Transaction, all as the Applicable Percentage of such series of Preferred Stock may reasonably request from time to time. Unless the Applicable Percentage of any particular series of Preferred Stock delivers a notice to the Corporation within fifteen (15) calendar days after receipt of an Event Notice stating that such Acquisition Transaction shall not be treated as a Liquidation for purposes of this Certificate with respect to such series of Preferred Stock, such Acquisition Transaction shall be treated as a Liquidation with respect to such series of Preferred Stock. Upon the closing of any Acquisition Transaction, and as a condition to the consummation of the Acquisition Transaction, and prior to or concurrently with consideration from any such Acquisition Transaction being paid to the Corporation or to stockholders of the Corporation other than holders of Preferred Stock, the Corporation shall pay, or cause to be paid, to the holders of Preferred Stock, and each holder of Preferred Stock shall be entitled to receive, in cash, securities or other property, before any distribution or payment is made to any holders of Common Stock or any Junior Stock and in the order and priority set forth in Section C.3.2(b) of this Article IV, an amount per share which is equal to (A) in the case of the Series A Preferred Stock, the Series A Liquidation Preference (the "*Series A Transaction Payment*"), (B) in the case of the Series B Preferred Stock, the Series B Liquidation Preference (the "*Series B Transaction Payment*"), (C) in the case of the Series C-1 Preferred Stock, the Series C-1 Liquidation Preference (the "*Series C-1 Transaction Payment*"), (D) in the case of the Series C-2 Preferred Stock, the Series C-2 Liquidation Preference (the "*Series C-2 Transaction Payment*"), (E) in the case of the Series C-3 Preferred Stock, the Series C-3 Liquidation Preference (the "*Series C-3 Transaction Payment*"), (F) in the case of the Series C-4 Preferred Stock, the Series C-4 Liquidation Preference (the "*Series C-4 Transaction Payment,*"), (G) in the case of the Series D Preferred Stock, the Series D Liquidation Preference (the "*Series D Transaction Payment*")and (H)in the case of the Series E Preferred Stock, the Series E Liquidation Preference (the "*Series E Transaction Payment*") and collectively with the Series A Transaction Payment, the Series B Transaction Payment, the Series C-1 Transaction Payment, the Series C-2 Transaction Payment, the Series C-3 Transaction Payment, the Series C-4 Transaction Payment, and the Series D Transaction Payment the "*Preferred Stock Transaction Payment*"). In the case of an Acquisition Transaction of a type described in clause (a) of the definition of "Acquisition Transaction" contained in Section D of this Article IV, for purposes of calculating the Series A Liquidation Preference, the Series B Liquidation Preference, the Series C Liquidation Preference, the Series D Liquidation Preference and the Series E Liquidation Preference for purposes of this Section C.3.2(a) of Article IV, the amount of Available Assets shall be deemed to be an amount equal to the aggregate value of all consideration to be received pursuant to such Acquisition Transaction, net of any liabilities of

the Corporation not assumed or otherwise paid by the acquiring Person. In the case of an Acquisition Transaction involving any transaction or transactions of a type described in clauses (b) or (c) of the definition of "Acquisition Transaction" contained in Section D of this Article IV, for purposes of calculating the Series A Liquidation Preference, the Series B Liquidation Preference, the Series C Liquidation Preference, the Series D Liquidation Preference and the Series E Liquidation Preference for purposes of this Section C.3.2(a) of Article IV, the amount of Available Assets shall be deemed to be an amount equal to the aggregate value of all consideration to be received pursuant to such Acquisition Transaction divided by a fraction, the numerator of which is the total number of shares of Common Stock deemed to be sold, conveyed, disposed, exchanged, or otherwise transferred by the Corporation's stockholders pursuant to such Acquisition Transaction (determined on a Fully-Diluted Basis) and the denominator of which is the sum of the total number of shares of Common Stock outstanding and the total number of shares of Common Stock Issuable with respect to Common Stock Equivalents outstanding immediately prior to such Acquisition Transaction. Upon the payment in full of any Preferred Stock Transaction Payment to the holders of any series of Preferred Stock, the shares of such series of Preferred Stock shall be deemed cancelled and shall no longer be outstanding and the holders of such shares shall have no further rights in respect thereof.

(b) Payment of Transaction Payment.

(i) If all of the consideration payable to the Corporation or to the Corporation's stockholders consists of cash, then the Preferred Stock Transaction Payment shall be paid in cash. If any consideration consisting of securities or property other than cash is Issued or payable to the Corporation or to the Corporation's stockholders in the Acquisition Transaction, then the Preferred Stock Transaction Payment shall be paid to the holders of each series of Preferred Stock to whom any Preferred Stock Transaction Payment is to be paid in such portions of cash and such property and securities such that all holders of such series of Preferred Stock and Common Stock shall receive the same proportion of cash and such property and securities in respect of the amounts to which they are entitled to receive pursuant to Section C.3.1 of this Article IV. Any securities utilized to make the Preferred Stock Transaction Payment, if any, shall have the same rights, preferences and restrictions (including whether the issuance or sale of such securities is registered or entitled to registration rights under the Securities Act of 1933, as amended) as the securities Issued or payable in the Acquisition Transaction.

(ii) The holders of Series E Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid prior and in preference to the holders of Senior Preferred Stock. The holders of Senior Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid only after the holders of Series E Preferred Stock shall have received full payment of all Preferred Stock Transaction Payment amounts to which such holders of Series E Preferred Stock are entitled under Section C.3.2(a) of this Article IV. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Senior Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Senior Preferred Stock shall share in any payment of the Preferred Stock

Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Senior Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full. The holders of Senior Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid prior and in preference to the holders of Series C Preferred Stock. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Senior Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Senior Preferred Stock shall share in any payment of the Preferred Stock Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Senior Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full. The holders of Series C Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid only after the holders of Senior Preferred Stock shall have received full payment of all Preferred Stock Transaction Payment amounts to which such holders of Senior Preferred Stock are entitled under Section C.3.2(a) of this Article IV. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Series C Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Series C Preferred Stock shall share ratably in any payment of the Preferred Stock Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Series C Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full.

3.3 Valuation of Non-Cash Items. If any of the consideration which is Issuable or payable to the Corporation or to the Corporation's stockholders consists of securities or property other than cash or evidences of indebtedness (for which the value of such evidences of indebtedness shall be deemed to be the principal amount thereof), then the value of such securities or other property shall be deemed its fair market value, determined as follows:

(a) Any securities not subject to investment letter or other similar restriction on free marketability covered by (b) below shall be valued as follows:

(i) If such securities are traded on a securities exchange or through the Nasdaq National Market, then the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Acquisition Transaction;

(ii) If such securities are actively traded over-the-counter, then the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Acquisition Transaction; and

(iii) If there is no active public market, then the value shall be the fair market value thereof, as determined in good faith, by the Board on the date such determination is made.

(b) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an "Affiliate," as such term is defined in regulation D promulgated under the Securities Act of 1933, as amended, or former "Affiliate") shall be to make an appropriate discount from the market value thereof determined as above in (a)(i), (a)(ii), or (a)(iii) to reflect the approximate fair market value thereof, as determined in good faith by the Board.

(c) Any property other than cash and evidences of indebtedness and securities shall have the fair market value of such property as determined in good faith, by the Board on the date such determination is made.

(d) The foregoing methods for valuing securities and property other than cash and evidences of indebtedness to be paid or Issued in connection with an Acquisition Transaction shall, upon approval by the stockholders of the definitive agreements governing the Acquisition Transaction, be superseded by any determination of such value set forth in the definitive agreements governing such Acquisition Transaction.

4. Voting Rights.

4.1 General. In addition to the specific voting and consent rights of the Series E Preferred Stock provided in this Section C.4 and in Section C.6 of this Article IV, each holder of Preferred Stock shall be entitled to vote together with the Common Stock and all other series and classes of the Corporation's capital stock permitted to vote with the Common Stock on all matters submitted to a vote of the holders of the Common Stock (including election of directors) in accordance with the provisions of this Section C.4, except with respect to matters in respect of which one or more other classes or series of the Corporation's capital stock is entitled to vote as a separate class under the DGCL or the provisions of this Certificate. Each holder of Preferred Stock shall be entitled to notice of any stockholders' meeting at the same time and in the same manner as notice is given to all other stockholders entitled to vote at such meetings. For each vote in which holders of Preferred Stock are entitled to participate, the holder of each share of Preferred Stock shall be entitled to that number of votes per share to which such holder would have been entitled had such share of Preferred Stock then been converted into shares of Common Stock pursuant to the provisions of Section C.5.1 of this Article IV, at the record date for the determination of those holders entitled to vote on such matters or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is solicited.

4.2 Board of Directors.

(a) Board Size. The authorized number of directors constituting the entire Board shall be five (5) (or such smaller or larger number as may be authorized in compliance with Section C.6 of this Article IV). The Board will remain unchanged at five members and shall not be modified or have an increase in size without the prior written consent

of the placement agent for the 2012 common stock offering for a period of one year following the expiration of any lock up agreement entered into in connection with the Pubco Transaction.

(b) Series E Preferred Stock Directors. For so long as any shares of Series E Preferred Stock remain outstanding, the Applicable Percentage of the Series E Preferred Stock shall be entitled to elect two (2) members of the Board (the "*Series E Preferred Stock Directors*") at each meeting, or pursuant to each consent of the Corporation's stockholders, for the election of directors, and to remove from office, with or without cause, any Series E Preferred Stock Directors and to fill any vacancy caused by the death, resignation or removal of any Series E Preferred Stock Director.

(c) Other Directors. The holders of a majority of the Preferred Stock and of the Common Stock outstanding, voting together as a single class (with each share of Preferred Stock being entitled to the number of votes determined in accordance with the last sentence of Section C.4.1 of this Article IV), shall be entitled to elect all members of the Board not specified in Section C.4.2(b) of this Article IV at each meeting, or pursuant to each consent of the Corporation's stockholders, for the election of directors, and to remove from office, with or without cause, any directors elected pursuant to this Section C.4.2(c) and to fill any vacancy caused by the death, resignation or removal of any such director.

(d) Term. The directors shall be divided into three classes, designated Class I, Class II and Class III. Class I shall consist of two independent directors, Class II shall consist of the two Series E Preferred Stock Directors, and Class III shall consist of the chief executive officer. Each such director shall serve for a term ending on the date of the third annual meeting of shareholders following the annual meeting at which the director was elected. Notwithstanding the foregoing, each director shall serve until his successor is duly elected and qualified, or until his retirement, death, resignation or removal. In order to implement a staggered Board of Directors at the 2012 Annual Meeting of Stockholders, Class I shall serve a one (1) year term; Class II shall serve a two (2) year term; and Class III shall serve a three (3) year term. Directors elected at each annual meeting after the 2012 Annual Meeting of Stockholders shall be elected for a 3 year term as specified above.

4.3 Additional Voting Rights. The holders of shares of Series E Preferred Stock, voting together as a single class, shall have the additional voting and consent rights set forth in Section C.6 of this Article IV.

5. Conversion. The holders of Preferred Stock shall have the following rights and be subject to the following obligations with respect to the conversion of shares of Preferred Stock into shares of Common Stock. The number of shares of Common Stock which a holder of any particular series of Preferred Stock shall be entitled to receive upon the conversion of such Preferred Stock shall be equal to the product obtained by multiplying the Conversion Rate then in effect for such series by the number of shares of such series of Preferred Stock being converted. The "*Conversion Rate*" means (a) with respect to the Series A Preferred Stock, the Series C-1 Preferred Stock, the Series C-2 Preferred Stock, the Series C-3 Preferred Stock and the Series C-4 Preferred Stock, as applicable, the quotient obtained by dividing an amount equal to (i) the Applicable Per Share Stated Value for such series of Preferred Stock by (ii) the Applicable Conversion Price for such series of Preferred Stock, (b) with respect to the Series B

Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series B Preferred Stock, plus (B) all accrued and unpaid Series B and D Preferred Dividends attributable to the Series B Preferred Shares by (b) the Applicable Conversion Price for the Series B Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series B Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series B and D Dividends in cash upon the conversion of the Series B Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series B Preferred Stock in determining the Conversion Rate for the Series B Preferred Stock, and (c) with respect to the Series D Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series D Preferred Stock, plus (B) all accrued and unpaid Series B and D Preferred Dividends attributable to the Series D Preferred shares by (b) the Applicable Conversion Price for the Series D Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series D Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series B and D Dividends in cash upon the conversion of the Series D Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series D Preferred Stock in determining the Conversion Rate for the Series D Preferred Stock, and (d) with respect to the Series E Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series E Preferred Stock, plus (B) all accrued and unpaid Series E Preferred Dividends attributable to the Series E Preferred shares by (b) the Applicable Conversion Price for the Series E Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series E Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series E Dividends in cash upon the conversion of the Series E Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series E Preferred Stock in determining the Conversion Rate for the Series E Preferred Stock.

5.1 Optional Conversion. Subject to and in compliance with the provisions of this Section C.5, each share of Preferred Stock may, at the option of the holder thereof, be converted at any time, and from time to time, into fully-paid and non-assessable shares of Common Stock.

5.2 Automatic Conversion.

(a) Consent/Initial Public Offering/Pubco Transaction. Each share of Preferred Stock and accrued dividends shall automatically convert into fully-paid and non-assessable shares of Common Stock upon the first to occur of (a) the affirmative approval or written consent of, and written notice to, the Corporation by the Applicable Percentage of Series E Preferred Stock, voting as a separate class or (b) the time immediately prior to the consummation of a Qualified Initial Public Offering or a Pubco Transaction, in each case, without any further action by the holder, and whether or not the certificate or certificates representing such shares are surrendered to the Corporation,. To the extent permitted by law, an automatic conversion pursuant to clause (a) of this Section C.5.2 shall be deemed to have been effected as of the close of business on the date on which such written notice shall have been received by the Corporation.

5.3 Anti-Dilution Adjustments.

(a) Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. Except as provided in Sections C.5.3(b) and C.5.3(c), for so long as there are any shares of Series E Preferred Stock or 2012 Common Stock Warrants outstanding, if and whenever at any time and from time to time after the Series E Original Issue Date or the 2012 Common Stock Warrant Original Issue Date, as applicable, the Corporation shall Issue, or is, in accordance with Sections C.5.3(a)(i) through C.5.3(a)(vii) of this Article IV, deemed to have Issued, any shares of Common Stock for no consideration or a consideration per share less than the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the time of such Issuance or, as to Common Stock Equivalents, Net Consideration Per Share less than the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the time of such Issuance or the exercise price for the 2012 Common StockWarrants, as applicable,, then, forthwith upon such Issue or sale, the 2012 Common Stock Warrant exercise price shall be subject to proportional adjustment and/or the Applicable Conversion Price with respect to the Series E Preferred Stock shall be reduced to the price (calculated to the nearest tenth of a cent) determined by multiplying such Common Stock Warrant exercise price or Applicable Conversion Price for the Series E Preferred Stock by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the Issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Corporation for the total number of such additional shares of Common Stock so Issued or deemed to be Issued would purchase at the Applicable Conversion Price for the Series E Preferred Stock or 2012 Common Stock Warrant exercise price, as applicable, in effect immediately prior to such Issuance; and

N(2) = the number of such additional shares of Common Stock so Issued or deemed to be Issued.

The provisions of this Section C.5.3(a) may be waived as to all shares of Series E Preferred Stock, in any instance, upon the written consent or agreement of the Applicable Percentage for the Series E Preferred Stock.

No other series of Preferred Stock other than the Series E Preferred Stock shall have any rights for an adjustment of conversion price pursuant to this Section C.5.3 upon the issuance of shares of common stock of the Company.

For purposes of this Section C.5.3(a), the following Sections C.5.3(a)(i) to C.5.3(a)(vii) shall be applicable:

(i) Consideration for Shares. For purposes of this Section C.5.3(a), the consideration received by the Corporation for the Issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

(A) insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

(B) insofar as such consideration consists of property other than cash, the value of such property received by the Corporation shall be deemed to be the fair value of such property at the time of such Issuance as determined in good faith by the Board (which determination must include the approval of the Series E Preferred Stock Directors), without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith;

(C) insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock Issued or deemed Issued; and

(D) in the event that Common Stock or Common Stock Equivalents shall be Issued in connection with the Issue of other securities of the Corporation, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board (which determination must include the approval of the Series E Preferred Stock Directors).

(ii) Issuance of Common Stock Equivalents. The Issuance of any Common Stock Equivalents shall be deemed an Issuance of the maximum number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents. If the terms of any Common Stock Equivalents (excluding Common Stock Equivalents which are themselves Exempted Securities), the Issuance of which did not result in an adjustment to Applicable Conversion Price for the Series E Preferred Stock, pursuant to the provisions of this Section C.5.3 (either because the Net Consideration Per Share of the Common Stock subject thereto was equal to or greater than the Applicable Conversion Price for the Series E Preferred Stock then in effect, or because Common Stock Equivalent was issued before the Series E Original Issue Date), are revised after the Series E Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of

such Common Stock Equivalent the effect of which is to provide for either (A) any increase or decrease in the number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of any such Common Stock Equivalent or (B) any increase or decrease in the Net Consideration Per Share payable to the Corporation with respect to the Issuance of such Common Stock Equivalent or the Common Stock subject thereto upon such exercise, conversion or exchange, then such Common Stock Equivalent, as so amended or adjusted, and the maximum number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalent (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion) shall be deemed to have been issued effective upon such revision becoming effective.

(iii) Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Corporation for any shares of Common Stock Issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Corporation for the Issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Corporation upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be Issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

(iv) Revisions to Common Stock Equivalents. If the terms of any Common Stock Equivalent, the issuance of which resulted in an adjustment to the Series E Preferred Stock pursuant to the terms of this Section C5.3 of this Article IV, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Common Stock Equivalent, the effect of which is to provide for either (1) any increase or decrease in the number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of any such Common Stock Equivalent or (2) any increase or decrease in the Net Consideration Per Share payable to the Corporation with respect to the Issuance of such Common Stock Equivalent or the Common Stock subject thereto upon such exercise, conversion or exchange, then, effective upon such revisions becoming effective, the Applicable Conversion Price for the Series E Preferred Stock computed upon the original Issuance of such Common Stock Equivalent (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Applicable Conversion Price as would have been obtained had such revised terms been in effect upon the original date of Issuance of such Common Stock Equivalent. Notwithstanding the foregoing, no readjustment pursuant to this clause (iv) shall have the effect of increasing such Applicable Conversion Price to an amount which exceeds the lower of (A) the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the original adjustment made as a result of the issuance of such Common Stock Equivalent, or (B) the Applicable Conversion Price for such Series E Preferred Stock that would have resulted from any Issuances of Common Stock or Common Stock Equivalents (other than deemed Issuances of Common Stock as a result of the Issuance of such revised Common Stock Equivalent) between the original adjustment date and such readjustment date.

(v) Expiration and Termination of Common Stock Equivalents. Upon the expiration or termination of any unexercised, unconverted or unexchanged Common Stock Equivalent (or portion thereof) which resulted (either upon its original Issuance or upon a revision of its terms) in an adjustment to the Applicable Conversion Price for the Series E Preferred Stock pursuant to the terms of this Section C.5.3, the Applicable Conversion Price for the Series E Preferred Stock shall be readjusted to such Applicable Conversion Price as would have been obtained had such Common Stock Equivalent (or portion thereof) never been issued. Notwithstanding the foregoing, no readjustment pursuant to this clause (v) shall have the effect of increasing such Applicable Conversion Price to an amount which exceeds the lower of (A) the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the original adjustment made as a result of the Issuance of such Common Stock Equivalent, or (B) the Applicable Conversion Price for such the Series E Preferred Stock that would have resulted from any Issuances of Common Stock or Common Stock Equivalents (other than deemed Issuances of Common Stock as a result of the Issuance of such expired or terminated Common Stock Equivalent (or portion thereof)) between the original adjustment date and such readjustment date.

(vi) Record Date. In case the Corporation shall establish a record date with respect to the holders of any class or series of the Corporation's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the Issuance of the shares of Common Stock deemed to have been Issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(vii) Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section C.5.3(a) shall not apply under any of the circumstances contemplated in Section C.5.3(b) or C.5.3(c) of this Article IV. Further, the anti-dilution adjustments set forth in this Section C.5.3(a) shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

(A) the Issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) to employees, consultants, officers or directors of the Corporation or any Affiliate or Subsidiary of the Corporation pursuant to a stock option plan or restricted stock plan or arrangement, which Issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

(B) the Issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

(C) the Issuance of shares of Common Stock in a Qualified Initial Public Offering or merger of the Corporation with or acquisition of the Corporation by an entity whose capital stock is traded on a public exchange;

(D) the Issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and are approved by a majority of the entire Board (which majority must include the Series E Preferred Stock Directors);

(E) the Issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and that are approved a majority of the entire Board (which majority must include the Series E Preferred Stock Directors);

(F) the Issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Corporation's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board (which majority must include the Series E Preferred Stock Directors); or

(G) the Issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Corporation or any of its Affiliates (1) to investment bankers, placement agents or advisors in connection with the issuance of Series E Preferred Stock, or (2) in which an exemption from the anti-dilution provisions is specifically approved in writing by the Applicable Percentage of the Series E Preferred Stock, in the case of an Issuance for a consideration or a Net Consideration Per Share less than the Applicable Conversion Price with respect to the Series E Preferred Stock which is approved a majority of the entire Board (which majority must include the Series E Preferred Stock Directors).

(b) Adjustment Upon Extraordinary Stock Event. Upon the happening of an Extraordinary Stock Event, the Applicable Conversion Price for each share of Preferred Stock shall, simultaneously with the happening of such Extraordinary Stock Event, be adjusted by multiplying such Applicable Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Stock Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Stock Event and the product so obtained shall thereafter be the Applicable Conversion Price for such share of Preferred Stock, which, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Stock Event or Events. An "*Extraordinary Stock Event*" shall mean (i) the Issuance of additional shares of Common Stock as a dividend or other distribution on outstanding shares of Common Stock, (ii) a subdivision or stock split of outstanding shares of Common Stock into a greater number of shares of Common Stock, or (iii) a combination or reverse stock split of outstanding shares of Common Stock into a smaller number of shares of Common Stock.

(c) Reorganization or Reclassification. In the event of (i) any capital reorganization, any reclassification of the capital stock of the Corporation or other change in the capital stock of the Corporation (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of any Extraordinary Stock Event), (ii) any consolidation, merger, reorganization or share exchange involving the Corporation or any Subsidiary (any such transaction described in clauses (i) and (ii) hereof, an "*Extraordinary Transaction*"), then the holder of each share of Preferred Stock shall have the right thereafter to receive, in lieu of the shares of Common Stock immediately theretofore receivable upon the conversion of such shares of Preferred Stock pursuant to Section C.5.1 of this Article IV, the kind and amount of shares of stock or other securities or property as may be Issued or payable with respect to or in exchange for that number of shares of Common Stock into which such holder's shares of Preferred Stock is, immediately prior to such Extraordinary Transaction, convertible, and in any such case appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions of this Certificate (including, without limitation, provisions for adjustments of the Applicable Conversion Price for such Preferred Stock) shall thereafter be applicable in relation to any shares of stock or other securities or property thereafter deliverable upon the exercise of such conversion rights. The provision for such conversion right to the holders of Preferred Stock shall be a condition precedent to the consummation by the Corporation of any Extraordinary Transaction, unless (a) such Extraordinary Transaction is also an Acquisition Transaction and (b) the Applicable Percentage of any particular series of Preferred Stock does not provide notice to the Corporation in accordance with Section C.3.2 of this Article IV of their election to not treat such Acquisition Transaction as a Liquidation, in which case, the provisions of Section C.3.2 of this Article IV, and not this Section C.5.3(c), shall apply with respect to such particular series. The provisions of this Section C.5.3(c) shall apply with respect to each series of Preferred Stock that provides notice to the Corporation in accordance with Section C.3.2 of this Article IV of such series' election to not treat such Acquisition Transaction as a Liquidation. The provisions of this Section C.5.3(c) shall similarly apply to successive Extraordinary Transactions.

(d) Notice of Adjustment. Upon any adjustment of the Applicable Conversion Price for any particular series of Preferred Stock or change in the exercise price of 2012 Common Stock Warrants, then in each such case the Corporation shall give written notice thereof to each holder of such series of Preferred Stock or 2012 Common Stock Warrants, as applicable, which notice shall state the Applicable Conversion Price resulting from such adjustment or changes in exercise price, setting forth in reasonable detail the method upon which such calculation is based.

5.4 Status of Converted or Repurchased Preferred Stock. Any shares of Preferred Stock cancelled pursuant to Section C.3.2 of this Article IV, converted into Common Stock or acquired by the Corporation by reason of exchange, purchase or otherwise shall be cancelled and shall not be subject to reissuance, and the capital of the Corporation shall be automatically reduced by a corresponding amount. Upon the cancellation of all outstanding shares of any particular series of Preferred Stock, the provisions of the designation of such series of Preferred Stock shall terminate and have no further force and effect.

5.5 Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of shares of Preferred Stock shall be made without charge to the holders thereof for any issuance, documentary, stamp or other transactional tax in respect thereof, provided that the Corporation shall not be required to pay any such tax that may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the shares of Preferred Stock which is being converted.

5.6 Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Preferred Stock or of any shares of Common Stock Issued or Issuable upon the conversion of any shares of Preferred Stock in any manner which interferes with the timely conversion of such shares of Preferred Stock.

5.7 Exercise Of Conversion Privilege; Delivery of Certificates. To exercise its conversion privilege under Section C.5.1 of this Article IV, a holder of Preferred Stock shall surrender the certificate or certificates representing the shares being converted to the Corporation at its principal office, or , if such certificate(s) have been lost, stolen or destroyed, then the holder shall deliver a certificate executed by such holder certifying to such fact, together with an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by the Corporation in connection with such lost, stolen or destroyed certificate, and shall give written notice to the Corporation at that office that such holder elects to convert such shares. Such written notice shall state the date on, or the time at which, the conversion is to be deemed effective and any conditions to such effectiveness. If such written notice does not state any such date, time or conditions, then the date when such written notice of exercise of the conversion privilege is received by the Corporation, together with the certificate or certificates representing the shares of Preferred Stock being converted (or, if applicable, the certification and indemnity agreement described above), shall be the date on which the conversion is deemed effective. The date or time at which any conversion of one or more series of Preferred Stock is deemed effective under this Section C.5.7 is referred to in this Certificate as the "*Conversion Date*." Following an automatic conversion of the Preferred Stock pursuant to Section C.5.2 of this Article IV, each holder of Preferred Stock being so automatically converted shall, as promptly as practicable following receipt of notice of such event from the Corporation, surrender the certificate or certificates representing such Preferred Stock (or, if applicable, the certification and indemnity agreement described above) to the Corporation at the principal office of the Corporation, together with a notice containing the information specified below. Any notice required to be provided by a holder of Preferred Stock under this Section C.5.7 shall also state the name or names (with address or addresses) in which the certificate or certificates for shares of Common Stock issuable upon such conversion shall be issued. The certificate or certificates for shares of Preferred Stock surrendered for conversion shall be accompanied by proper assignment thereof to the Corporation or in blank. As promptly as practicable after the Conversion Date for the Preferred Stock being converted, or the date on which the Corporation receives a holder's certificate(s) (or, if applicable, the certification and indemnity agreement described above) with respect to an automatic conversion, the Corporation shall issue and deliver to the holder of the shares of Preferred Stock being converted, or on its written order, such certificate or certificates as it may request for the number of whole shares of Common Stock issuable upon the conversion of such shares of Preferred Stock in accordance with the provisions of Section C.5 of this Article IV, and cash, as provided in Section C.5.8 of this Article IV in respect of any fraction of a share of Common Stock issuable upon such conversion. At such time

as any conversion of shares of Preferred Stock is effective, the rights of the holder as holder of the converted shares of Preferred Stock shall cease and the person(s) in whose name(s) any certificate(s) for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby, regardless of whether the certificates that represented the converted shares of Preferred Stock have been surrendered by the holder thereof.

5.8 Fractional Shares; Distributions; Partial Conversion. No fractional shares of Common Stock shall be Issued upon conversion of shares of Preferred Stock into shares of Common Stock and no payment or adjustment shall be made upon any conversion on account of any cash distributions on the shares of Common Stock Issued upon such conversion. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Section C.5.7 exceeds the number of shares of Preferred Stock converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of the particular series of Preferred Stock represented by the certificate or certificates surrendered that are not to be converted. If any fractional shares of Common Stock would, except for the provisions of the first sentence of this Section C.5.8, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the shares of Preferred Stock for conversion an amount in cash equal to the fair market value of such fractional share as determined in good faith by the Board.

6. Restrictions and Limitations on Corporate Action. For so long as any shares of Series E Preferred Stock are outstanding, the affirmative vote of the Applicable Percentage of Series E Preferred Stock outstanding voting as a separate class shall be required to authorize, any action by the Corporation or any of its Subsidiaries involving any of the following:

(a) the authorization, designation, creation, reclassification or Issuance of (i) any class or series of capital stock of the Corporation or any of its Subsidiaries, including without limitation, any Preferred Stock pursuant to Section A of this Article IV, (ii) any bonds, debentures, notes or other debt security of the Corporation or any of its Subsidiaries, or (iii) any securities, bonds, debentures, notes or other obligations directly or indirectly convertible into or exercisable or exchangeable for, or having optional rights to purchase or otherwise acquire, any class or series of capital stock of the Corporation or any of its Subsidiaries, other than Excluded Securities of any kind described in clauses (A) through (F), inclusive, of Section 5.3(a)(vii) of this Article IV;

(b) any increase or decrease in the authorized number of shares of capital stock of the Corporation or any of its Subsidiaries or the number of designated shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, or Series E Preferred Stock;

(c) any amendment, alteration, restatement, repeal, addition or other change to the designations, powers, preferences, rights, privileges or qualifications, limitations or restrictions of any series of Preferred Stock, whether by merger, consolidation, recapitalization, reorganization or otherwise;

(d) the declaration or payment of any dividends, payments or any other distribution, direct or indirect, on account of any securities of the Corporation or any of its Subsidiaries, or the set aside of any funds for any such purpose, except for (i) the Series E Preferred Dividends, (ii) dividends or distributions on outstanding shares of Common Stock payable solely in shares of Common Stock, (iii) dividends and distributions made in accordance with the express terms of any capital stock issued with the approval of the Applicable Percentage of Series E Preferred Stock, voting as a separate class, in accordance with Section C.6(a) of this Article IV, and (iv) dividends, payments and distributions by Subsidiaries of the Corporation to the Corporation;

(e) the redemption, repurchase, retirement or other acquisition by the Corporation or any of its Subsidiaries of any capital stock or other securities of the Corporation or any such Subsidiary, except for shares of Common Stock repurchased upon termination of an officer, employee, director or consultant at the lower of fair market value, as reasonably determined by the Board, or cost pursuant to a restricted stock purchase agreement that is approved by a majority of the entire Board;

(f) any financing arrangement or incurrence of any indebtedness, whether pursuant to the issuance of securities or otherwise, for or on behalf of the Corporation or any Subsidiary in aggregate principal amount outstanding at any time in excess of $500,000 including, without limitation, loan agreements, credit lines, letters of credit and capitalized leases;

(g) any (i) Liquidation, or (ii) Acquisition Transaction, in either case with respect to the Corporation or any of its Subsidiaries;

(h) any merger or consolidation of the Corporation with or into any other Person or permitting any of the Corporation's Subsidiaries to merge or consolidate with or into any other Person;

(i) any amendment, alteration, restatement, repeal, addition or other change to any provision of this Certificate or the Bylaws of the Corporation or any of its Subsidiaries' respective or similar constitutive documents, whether by merger, consolidation, recapitalization, reorganization or otherwise;

(j) any (i) adoption, approval, amendment or modification of any stock option plan, stock purchase plan, equity incentive plan or any similar plan, (ii) adoption, approval, amendment or modification of (A) the form of stock option agreement or restricted stock purchase or grant agreement or (B) stock option agreement or restricted stock purchase or grant agreement entered into by the Corporation or any of its Subsidiaries (including, without limitation, the acceleration of any vesting schedule thereunder and the termination, waiver or modification of the Corporation's repurchase rights thereunder), (iii) adoption or approval of any stock appreciation, phantom stock or similar rights or any grant thereof and (iv) any grant of stock options with an exercise price per share or unit that is less than the fair market value of such share or unit on the date of such grant (as reasonably determined by a majority of the entire Board) or issue or sell capital stock pursuant to restricted stock awards or restricted stock purchase agreements at a price per share or unit less than the

fair market value of such share or unit on the date of such issuance or sale (as reasonably determined by a majority of the entire Board);

(k) any increase or decrease in the authorized number of directors comprising the entire Board;

(l) any participation by the Corporation or allowance of any Subsidiary to participate in any business other than the business of researching, developing, manufacturing, marketing or selling pharmaceutical products or otherwise conducting business in the biopharmaceutical industry;

(m)any purchase, lease, license or other acquisition of any other Person, whether by equity purchase, merger, consolidation, reorganization, or otherwise, or of all or substantially all of the assets of any other Person, or the entering into by the Corporation or any of its Subsidiaries of a share exchange with another Person;

(n) the making of any loans, extensions of credit or guarantees other than (i) extensions of trade credit to unaffiliated third parties (other than employees) in the ordinary course of business, (ii) loans and advances to employees of the Corporation in the ordinary course of business not to exceed $50,000 in the aggregate outstanding at any time or (iii) guarantees of any indebtedness or contractual obligations incurred by any of the Corporation's Subsidiaries that are approved by a majority of the entire Board;

(o) the making of any capital expenditure in any fiscal year in excess of $500,000 not included in the annual budget for such fiscal year that is approved by a majority of the entire Board;

(p) any change of the Corporation's independent public accounting firm or any material change in accounting methods or policies not required to be made in accordance with accounting principles generally accepted in the United States;

(q) the entering into of any transaction with the Corporation's Affiliates (other than (A) normal employment and benefits arrangements approved by a majority of the entire Board,(B) payments to directors, officers and other agents of the Corporation or any Subsidiary pursuant to indemnities contained in the Corporation's or any Subsidiary's certificate of incorporation or bylaws or other similar constitutive documents or any indemnity agreement approved by a majority of the entire Boardto which the Corporation or any Subsidiary is party or bound, or (C) transactions between the Corporation and any Subsidiary in the ordinary course of business); or

(r) take action that results in taxation of the holders of Preferred Stock under Section 305 of the Internal Revenue Code, as amended.

7. No Dilution or Impairment. The Corporation will not, by amendment of this Certificate or through any reorganization, transfer of capital stock or assets, consolidation, merger, recapitalization, share exchange, dissolution, Issue of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Preferred Stock set forth herein, but will at all times in good faith assist in carrying out all of such terms.

8. Notices of Record Date. In the event of (a) any taking by the Corporation of a record of the holders of any class or series of the Corporation's capital stock or other securities for the purpose of determining the holders thereof who are entitled to receive any dividends or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of capital stock of any class or series or any other securities or property, or to receive any other right; (b) any capital reorganization, any reclassification of the capital stock of the Corporation or other change in the capital stock of the Corporation, any merger, consolidation or reorganization, or share exchange involving the Corporation or any Subsidiary, or any sale, conveyance, disposition, exclusive license, lease or other transfer, whether pursuant to a single transaction or series of related transactions, of all or substantially all of the assets of the Corporation or any Subsidiary; or (c) any Liquidation; then and in each such event the Corporation shall mail or cause to be mailed to each holder of Preferred Stock a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right and a description of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, sale, conveyance, disposition, exclusive license, lease, transfer, consolidation, merger, or Liquidation is expected to become effective, and (iii) the time, if any, that is to be fixed, as to when the holders of record of any such capital stock or other securities shall be entitled to exchange their shares of any such capital stock or other securities for cash, securities or other property deliverable upon such reorganization, reclassification, recapitalization, sale, conveyance, disposition, exclusive license, lease, transfer, consolidation, merger, share exchange or Liquidation. Such notice shall be sent at least twenty (20) calendar days prior to the date specified in such notice on which action is being taken.

9. Reservation Of Capital Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Preferred Stock (including any shares of Preferred Stock represented by any warrants, options, subscription or purchase rights for Preferred Stock). If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock (including any shares of Preferred Stock represented by any warrants, options, subscriptions or purchase rights for such Preferred Stock), the Corporation shall take such action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

10. Notices. Whenever written notice is required to be given by the Corporation or any stockholder to holders of the Preferred Stock, or by any stockholder to the Corporation, such notice shall be in writing and unless otherwise required by this Certificate or Delaware law, shall be deemed sufficient upon receipt when delivered personally, by courier, by confirmed facsimile or by confirmed electronic mail (to the extent notification by electronic mail has been consented to), or 48 hours after being deposited in the U.S. mail as first class mail with postage prepaid, if such notice is sent to the party at the most recent address as shown on the books of the Corporation or to the Corporation at the address of its principal place of business.

D. Definitions. For purposes of this Certificate of Incorporation, the following terms used herein shall have the meanings ascribed below:

"*Acquisition Transaction*" means: (a) any sale, conveyance, disposition, exclusive license, lease or other transfer, whether pursuant to a single transaction or a series of related transactions, of all or substantially all of the assets of the Corporation and/or its Subsidiaries, determined on a consolidated basis; (b) the acquisition of the Corporation by another Person by means of any transaction or series of related transactions (including, without limitation, any consolidation, merger, reorganization, sale of stock, recapitalization, share exchange, or other transaction involving the Corporation or any Subsidiary except for Issuances of securities by the Corporation that are approved by the Applicable Percentage of the Series E Preferred Stock outstanding, voting as a separate class, as provided in Section C.6 of this Article IV), that results in the holders of the Corporation's outstanding shares of capital stock immediately prior to any such transaction not holding (by virtue of such securities issued solely pursuant to such transaction), immediately after such transaction, securities representing at least a majority of the voting power of the Person surviving or resulting from such transaction or, if the surviving or resulting Person is a subsidiary of the Corporation or another Person immediately after such transaction, the entity whose securities are issued pursuant to such transaction or series of transactions; or (c) the effectuation by the Corporation or by any of the holders of the Corporation's outstanding capital stock of a transaction or series of related transactions (except for issuances of securities by the Corporation that are approved by the Applicable Percentage of the Series E Preferred Stock outstanding and voting as a separate class, as provided in Section C.6 of this Article IV) that results in the holders of the Corporation's outstanding capital stock immediately prior to any such transaction not holding (by virtue of such securities issued solely pursuant to such transaction) immediately after such transaction, securities representing at least a majority of the voting power of the Corporation.

"*Affiliate*" has the meaning set forth in Section C.3.3(b) of this Article IV.

"*Applicable Conversion Price*" means (a) with respect to each share of Series A Preferred Stock, $2.99 per share; (b) with respect to each share of the Series B Preferred Stock, $3.00 per share;(c) with respect to each share of the Series C-1 Preferred Stock, $4.00 per share; (d) with respect to each share of the Series C-2 Preferred Stock, $6.00 per share;(e) with respect to each share of the Series C-3 Preferred Stock, $12.00 per share; (f) with respect to each share of the Series C-4 Preferred Stock, $2.00 per share; (g) with respect to each share of the Series D Preferred Stock, $2.00 per share, and (h) with respect to each share of the Series E Preferred Stock, $0.261 per share, in each of the foregoing cases, subject to adjustment in accordance with Section C.5 of this Article IV.

"*Applicable Per Share Stated Value*" means (a) with respect to the Series A Preferred Stock, $4.00 per share; (b) with respect to the Series B Preferred Stock, $3.00 per share;(c) with respect to the Series C-1 Preferred Stock, $4.00 per share; (d) with respect to the Series C-2 Preferred Stock, $6.00 per share;(e) with respect to the Series C-3 Preferred Stock, $12.00 per share; (f)with respect to the Series C-4 Preferred Stock, $2.00 per share; (g) with respect to the Series D Preferred Stock, $2.00 per share, and (h) with respect to the Series E Preferred Stock, $0.261 per share in each of the foregoing cases, subject to appropriate and proportionate adjustment for stock dividends payable in shares of, stock splits and other

subdivisions and combinations of, and recapitalizations and like occurrences with respect to, such series of Preferred Stock.

"*Applicable Percentage*" means (a) with respect to any matter requiring the action, approval or consent of the holders of the Series A Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series A Preferred Stock voting together as a single class; (b) with respect to any matter requiring the action, approval or consent of the holders of the Series B Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series B Preferred Stock voting together as a single class; (c) with respect to any matter requiring the action, approval or consent of the holders of the Series C-1 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-1 Preferred Stock voting together as a single class; (d) with respect to any matter requiring the action, approval or consent of the holders of the Series C-2 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-2 Preferred Stock voting together as a single class; (e) with respect to any matter requiring the action, approval or consent of the holders of the Series C-3 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-3 Preferred Stock voting together as a single class; (f) with respect to any matter requiring the action, approval or consent of the holders of the Series C-4 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-4 Preferred Stock voting together as a single class;(g) with respect to any matter requiring the action, approval or consent of the holders of the Series D Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series D Preferred Stock voting together as a single class; (h) with respect to any matter requiring the action, approval or consent of the holders of the Series E Preferred Stock voting together as a single class, the holders of 51% of the outstanding shares of the Series E Preferred Stock voting together as a single class; and (g) with respect to any matter requiring the action, approval or consent of the holders of the Preferred Stock as a class, the holders of a majority of the outstanding shares of the Preferred Stock voting together as a single class; in each of the foregoing cases, with each share of Preferred Stock having a number of votes equal to the number of shares of Common Stock into which such share of Preferred Stock is then convertible.

"*Available Assets*" has the meaning as set forth in Section C.3.1(a) of this Article IV.

"*Board*" has the meaning set forth in Section B.2 of this Article IV.

"*Certificate*" means this Fifth Amended and Restated Certificate of Incorporation, as amended in accordance with the provisions hereof.

"*Common Stock*" has the meaning set forth in Section A of this Article IV.

"*Common Stock Equivalents*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

"*Conversion Date*" has the meaning set forth in Section C.5.7 of this Article IV.

"*Conversion Rate*" has the meaning as set forth in Section C.5 of this Article IV.

"*Event Notice*" has the meaning set forth in Section C.3.2(a) of this Article IV.

"*Excluded Securities*" has the meaning set forth in Section C.5.3(a)(vii) of this Article IV.

"*Extraordinary Stock Event*" has the meaning set forth in Section C.5.3(b) of this Article IV.

"*Extraordinary Transaction*" has the meaning set forth in Section C.5.3(c) of this Article IV.

"*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the Issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

"*Issue*" or "*Issuance*" in any of its forms, means to sell, grant or otherwise issue in any manner.

"*Junior Stock*" means, with respect to any particular class or series of the Corporation's capital stock, any other class or series of the Corporation's capital stock (a) specifically ranking by its terms to be junior to such particular class or series of capital stock or (b) not specifically ranking by its terms senior to or on parity with such particular class or series of capital stock, in each case, as to distribution of assets upon a Liquidation or otherwise.

"*Liquidation*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Net Consideration Per Share*" has the meaning as set forth in Section C.5.3(a)(iii) of this Article IV.

"*Person*" means any natural person, corporation, general partnership, limited partnership, limited liability partnership, limited liability company, proprietorship, joint venture, trust, association, union, entity or other form of business organization or any governmental or regulatory authority whatsoever.

"*Preferred Stock*" has the meaning set forth in Section A of this Article IV.

"*Preferred Stock Transaction Payment*" has the meaning set forth in Section C.3.2(a) of this Article IV.

"*Pubco Transaction*" means (i) a reverse merger or similar transaction between the Corporation and a corporation whose securities are publicly traded in the U.S. or other agreed upon jurisdiction, or (ii) the quotation of the Corporation's securities for purchase and sale on a U.S. quotation service (iii) any filing with an applicable regulatory body which will result in the Corporation becoming an entity whose securities are traded on a public exchange in the U.S. or other mutually agreed upon jurisdiction.

"*Qualified Initial Public Offering*" means the closing of the Corporation's initial direct public offering or underwritten public offering on a firm commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation (a) in which (i) the Corporation actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Corporation is listed on a national securities exchange.

"*Senior Liquidation Preference*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Senior Preferred Stock*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Series A Liquidation Preference*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Series A Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series B Issue Date*" means, with respect to a share of Series B Preferred Stock, the date upon which such share of Series B Preferred Stock was Issued by the Corporation.

"*Series B Liquidation Preference*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Series B Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series B Original Issue Date*" means the date on which the first share of Series B Preferred Stock was Issued by the Corporation.

"*Series B and D Preferred Dividend*" has the meaning set forth in Section C.2.1 of this Article IV.

"*Series E Preferred Dividend*" has the meaning set forth in Section C.2.1 of this Article IV.

"*Series E Preferred Stock Director*" has the meaning set forth in Section C.4.2C.4.2(b) of this Article IV.

"*Series C Liquidation Preference*" has the meaning set forth in Section C.3.1(c) of this Article IV.

"*Series C Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series C-1 Liquidation Preference*" has the meaning set forth in Section C.3.1(c) of this Article IV.

"*Series C-1 Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series C-2 Liquidation Preference*" has the meaning set forth in Section C.3.1(c) of this Article IV.

"*Series C-2 Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series C-3 Liquidation Preference*" has the meaning set forth in Section C.3.1(c) of this Article IV.

"*Series C-3 Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series C-4 Liquidation Preference*" has the meaning set forth in Section C.3.1(c) of this Article IV.

"*Series C-4 Preferred Stock*" has the meaning set forth in Section C.1of this Article IV.

"*Series D Issue Date*" means, with respect to a share of Series D Preferred Stock, the date upon which such share of Series D Preferred Stock was Issued by the Corporation.

"*Series D Liquidation Preference*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Series D Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Series E Issue Date*" means, with respect to a share of Series E Preferred Stock, the date upon which such share of Series E Preferred Stock was Issued by the Corporation.

"*Series E Liquidation Preference*" has the meaning set forth in Section C.3.1(a) of this Article IV.

"*Series E Preferred Stock*" has the meaning set forth in Section C.1 of this Article IV.

"*Subsidiary*" or "*Subsidiaries*" means any Person of which the Corporation, directly or indirectly through one or more intermediaries owns or controls at the time at least fifty percent (50%) of the outstanding voting equity or similar interests or the right to receive at least fifty percent (50%) of the profits or earnings or aggregate equity value.

"*2012 Common Stock Warrants*" means the warrants to purchase Common Stock issued as part of the offering of up to $25 million in 2012.

"*2012 Common Stock Warrant Issue Date*" means, with respect to a share of 2012 Common Stock Warrants, the date upon which such warrant was issued to the holder thereof in accordance with the terms of such warrant.

ARTICLE V

In furtherance of and not in limitation of the powers conferred by statute, the Board, acting by majority vote, is expressly authorized to make, alter or repeal the Bylaws of the Corporation, subject to the provisions of Section C.6 of Article IV of this Certificate.

ARTICLE VI

The directors of the Corporation shall be entitled to the benefits of all limitations on the liability of directors generally that are now or hereafter become available under the applicable law. Without limiting the generality of the foregoing, no director of the Corporation shall be personally liable to the Corporation or to any stockholder of the Corporation for monetary damages for breach of fiduciary duty as a director, provided that this provision shall not limit the liability of a director (a) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (b) for acts of omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the director derived an improper personal benefit. Any repeal or modification of this Article VI shall only be prospective and shall not affect any rights or protection under this Article VI in effect at the time of the alleged occurrence of any action or omission to act giving rise to liability.

ARTICLE VII

Elections of directors need not be by written ballot except and to the extent provided in the Bylaws of the Corporation.

ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide.

ARTICLE IX

The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware, at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE X

Pursuant to Section 122(17) of the DGCL, the Corporation hereby renounces any interest or expectancy of the Corporation or any of its Subsidiaries in, or in being offered an opportunity to participate in, any and all business opportunities that are presented to any of the holders of Preferred Stock, any of their respective Affiliates or any of the respective partners, members, directors, stockholders, employees or agents of any of the foregoing (including, without limitation, any representative or affiliate of such holders of Preferred Stock serving on the Board or the board of directors or other governing body of any Subsidiary of the Corporation (as applicable, a "*Governing Board*")) (collectively, the "*Covered Persons*"). Without limiting the foregoing renunciation, the Corporation on behalf of itself and its Subsidiaries (i) acknowledges that the Covered Persons may have or be affiliated with Persons having investments in other businesses similar to, and that may compete with, the businesses of the Corporation and its Subsidiaries ("*Competing Businesses*") and (ii) agrees that the Covered Persons shall have the unfettered right to make investments in, or have relationships with, other Competing Businesses independent of their investments in the Corporation. No Covered Person shall, by virtue of such Covered Person holding capital stock of the Corporation or having persons designated by or affiliated with such Covered Person serving on or observing at meetings of any Governing Board or otherwise, have any obligation to the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation to refrain from competing with the Corporation and any of its Subsidiaries, making investments in or having relationships with Competing Businesses, or otherwise engaging in any commercial activity, and none of the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation shall have any right with respect to any investment or activities undertaken by such Covered Person. Without limitation of the foregoing, each Covered Person may engage in or possess any interest in other business ventures of any nature or description, independently or with others, similar or dissimilar to the business of the Corporation or any of its Subsidiaries, and none of the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation shall have any rights or expectancy by virtue of such Covered Person's relationships with the Corporation, or otherwise, in and to such independent ventures or the income or profits derived therefrom; and the pursuit of any such ventures by any Covered Person, even if such investment is in a Competing Business, shall not for any purpose be deemed wrongful or improper. No Covered Person shall be obligated to present any particular investment opportunity to the Corporation or its Subsidiaries even if such opportunity is of a character that, if presented to the Corporation or such Subsidiary, could be taken by the Corporation or such Subsidiary, and each Covered Person shall continue to have the right for its own respective account, or to recommend to others, any such particular investment opportunity.

The provisions of this Article X in no way limit (A) any applicable duties of any Covered Person with respect to the protection of any proprietary or confidential information of the Corporation and any of its Subsidiaries including, without limitation, any applicable duty to

not disclose or use such proprietary or confidential information improperly or (B) any express written contractual obligation to which any Covered Person may otherwise be bound to the Corporation or any of its Subsidiaries. In addition, except as expressly set forth in this Article Xwith respect to business opportunities, the provisions of this Article X in no way limit any fiduciary or other duty of any Covered Person. Nothing contained in this Article X shall in any way expand any fiduciary or other duty of any Covered Party beyond such duties as may be imposed under the DGCL.

ARTICLE XI

The Corporation shall, to the maximum extent permitted from time to time under the laws of the State of Delaware, indemnify and hold harmless any person who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding or claim, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was or has agreed to be a director or officer of the Corporation or while a director or officer is or was serving at the request of the Corporation as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against any and all expenses (including reasonable and invoiced attorneys' fees and expenses), judgments, fines, penalties and amounts paid in settlement or incurred in connection with the investigation, preparation to defend or defense of such action, suit, proceeding or claim; provided, that the foregoing shall not require the Corporation to indemnify any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person. The Corporation shall advance all expenses incurred by an indemnified party in connection with the investigation, defense, settlement or appeal of any civil or criminal action, suit or proceeding referred to in this Article XI (including amounts actually paid in settlement of any such action, suit or proceeding). All rights pursuant to this Article XI shall inure to the benefit of the heirs and legal representatives of such person. Any repeal or modification of the foregoing provisions of this Article XI shall not adversely affect any right or protection of a director or officer of this Corporation existing at the time of such repeal or modification.

ARTICLE XII

Subject to the provisions of Section C.6 of Article IV of this Certificate, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate, in the manner now or hereafter prescribed by statute. As permitted by Section 242(b)(2) of the Code, the number of authorized shares of any class or series of Common Stock, Preferred Stock and any other class or series of the Corporation's capital stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of holders of a majority of the Common Stock and Preferred Stock of the Corporation, voting together as a single class, with each share of Preferred Stock having a number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock are then convertible, without the approval of the holders of any class or series of Common Stock, Preferred Stock and other capital stock voting as a separate class.

IN WITNESS WHEREOF, the undersigned has caused this Fifth Restated Certificate of Incorporation to be duly executed on behalf of the Corporation on October 24, 2012.

ACTINIUM PHARMACEUTICALS, INC.

By: _____

Print Name: Jack V. Talley

Title: President and Chief Executive Officer

[signature page to Fifth Amended and Restated Certificate of Incorporation]

AMENDED AND RESTATED BYLAWS

OF

ACTINIUM PHARMACEUTICALS, INC.

a Delaware corporation

(the *"Company")*

(Amended as of April 19, 2001)

BYLAWS
OF
Actinium Pharmaceuticals, Inc.

ARTICLE I.
OFFICES

Section 1.1 Registered Office. The registered office of the Company within the State of Delaware shall be located at either (i) the principal place of business of the Company in the State of Delaware or (ii) the office of the corporation or individual acting as the Company's registered agent in Delaware.

Section 1.2 Additional Offices. The Company may, in addition to its registered office in the State of Delaware, have such other offices and places of business, both within and without the State of Delaware, as the Board of Directors of the Company (the ***"Board"***) may from time to time determine or as the business and affairs of the Company may require.

ARTICLE II.
STOCKHOLDERS' MEETINGS

Section 2.1 Annual Meetings. Annual meetings of stockholders shall be held at a place and time on any weekday which is not a holiday as shall be designated by the Board and stated in the notice of the meeting, at which the stockholders shall elect the directors of the Company and transact such other business as may properly be brought before the meeting.

Section 2.2 Special Meetings. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by law or by the certificate of incorporation, (i) may be called by the chairman of the board or the president and (ii) shall be called by the president or secretary at the request in writing, of a majority of the Board or stockholders owning capital stock of the Company representing a majority of the votes of all capital stock of the Company entitled to vote thereat. Such request of the Board or the stockholders shall state the purpose or purposes of the proposed meeting.

Section 2.3 Notices. Written notice of each stockholders' meeting stating the place, date and hour of the meeting shall be given to each stockholder entitled to vote thereat by or at the direction of the officer calling such meeting not less than ten (10) nor more than sixty (60) days before the date of the meeting. If said notice is for a stockholders meeting other than an annual meeting, it shall in addition state the purpose or purposes for which said meeting is called, and the business transacted at such meeting shall be limited to the matters so stated in said notice and any matters reasonably related thereto.

Section 2.4 Quorum. The presence at a stockholders' meeting of the holders, present in person or represented by proxy, of capital stock of the Company representing a majority of the votes of all capital stock of the Company entitled to vote thereat shall constitute a quorum at such meeting for the transaction of business except as otherwise provided by law, the certificate of incorporation or these Bylaws. If a quorum shall not be present or represented at any meeting of the stockholders, a majority of the stockholders entitled to vote thereat, present in person or

represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such reconvened meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the reconvened meeting, a notice of said meeting shall be given to each stockholder entitled to vote at said meeting. The stockholders present at a duly convened meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

Section 2.5 Voting of Shares.

2.5.1 Voting Lists. The officer or agent who has charge of the stock ledger of the Company shall prepare, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote thereat arranged in alphabetical order and showing the address and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any such stockholder, for any purpose germane to the meeting, during ordinary business hours for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. The original stock transfer books shall be prima facie evidence as to who are the stockholders entitled to examine such list or transfer books or to vote at any meeting of stockholders. Failure to comply with the requirements of this section shall not affect the validity of any action taken at said meeting.

2.5.2 Votes Per Share. Unless otherwise provided in the certificate of incorporation, each stockholder shall be entitled to one vote in person or by proxy, at every stockholders meeting for each share of capital stock held by such stockholder.

2.5.3 Proxies. Every stockholder entitled to vote at a meeting or to express consent or dissent without a meeting or a stockholder's duly authorized attorney-in-fact may authorize another person or persons to act for him by proxy. Each proxy shall be in writing, executed by the stockholder giving the proxy or by his duly authorized attorney. No proxy shall be voted on or after three (3) years from its date, unless the proxy provides for a longer period. Unless and until voted, every proxy shall be revocable at the pleasure of the person who executed it, or his legal representatives or assigns, except in those cases where an irrevocable proxy permitted by statute has been given.

2.5.4 Required Vote. When a quorum is present at any meeting, the vote of the holders, present in person or represented by proxy, of capital stock of the Company representing a majority of the votes of all capital stock of the Company, entitled to vote thereat shall decide any question brought before such meeting, unless the question is one upon which, by express provision of law or the certificate of incorporation or these Bylaws, a different vote is required, in which case such express provision shall govern and control the decision of such question.

2.5.5 Consents in Lieu of Meeting. Any action required to be or which may be taken at any meeting of stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt, written notice of the action taken by means of any such consent which is other than unanimous shall be given to those stockholders who have not consented in writing.

ARTICLE III.
DIRECTORS

Section 3.1 Purpose. The business of the Company shall be managed by or under the direction of the Board, which may exercise all such powers of the Company and do all such lawful acts and things as are not by law, the certificate of incorporation or these Bylaws directed or required to be exercised or done by the stockholders. Directors need not be stockholders or residents of the State of Delaware.

Section 3.2 Number. The number of directors constituting the Board shall be determined by the Board from time to time and shall never be less than one and shall be no more than eight.

Section 3.3 Election. Directors shall be elected by the stockholders by plurality vote at an annual stockholders' meeting unless provided otherwise in the Certificate of Incorporation, and each director shall hold office until his successor has been duly elected and qualified or until his or her earlier resignation or removal.

Section 3.4 Vacancies. Unless otherwise restricted by the Certificate of Incorporation, vacancies and newly-created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until their successors are duly elected and qualified or until his or her earlier resignation or removal. If there are no directors in office, then an election of directors may be held in the manner provided by law. If, at the time of filling any vacancy or any newly-created directorship, the directors then in office shall constitute less than a majority of the whole Board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least fifty percent (50%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly-created directorships, or to replace the directors chosen by the directors then in office. No decrease in the size of the Board shall serve to shorten the term of an incumbent director.

Section 3.5 Removal. Unless otherwise restricted by law, the certificate of incorporation or these Bylaws, any director or the entire Board may be removed, with or without cause, by a majority vote of the shares entitled to vote at an election of directors, if notice of the intention to act upon such matter shall have been given in the notice calling such meeting.

Section 3.6 Compensation. Unless otherwise restricted by the certificate of incorporation or these Bylaws, the Board shall have the authority to fix the compensation of directors. The directors may be reimbursed their expenses, if any, of attendance at each meeting of the Board and may be paid either a fixed sum for attendance at each meeting of the Board or a stated salary as director. No such payment shall preclude any director from serving the Company in any other capacity and receiving compensation therefor. Members of committees of the Board may be allowed like compensation for attending committee meetings.

ARTICLE IV.
BOARD MEETINGS

Section 4.1 Annual Meetings. The Board shall meet as soon as practicable after the adjournment of each annual stockholders' meeting at the place of the stockholders' meeting. No notice to the directors shall be necessary to legally convene this meeting, provided a quorum is present.

Section 4.2 Regular Meetings. Regularly scheduled, periodic meetings of the Board may be held without notice at such times and places as shall from time to time be determined by resolution of the Board and communicated to all directors.

Section 4.3 Special Meetings. Special meetings of the Board (i) may be called by the chairman of the board or president and (ii) shall be called by the president or secretary on the written request of two directors or the sole director, as the case may be. Notice of each special meeting of the Board shall be given, either personally or as hereinafter provided, to each director at least 24 hours before the meeting if such notice is delivered personally or by means of telephone, telegram, telex or facsimile transmission and delivery; two days before the meeting if such notice is delivered by a recognized express delivery service; and three days before the meeting if such notice is delivered through the United States mail. Any and all business may be transacted at a special meeting which may be transacted at a regular meeting of the Board. Except as may be otherwise expressly provided by law, the certificate of incorporation or these Bylaws, neither the business to be transacted at, nor the purpose of, any special meeting need be specified in the notice or waiver of notice of such meeting.

Section 4.4 Quorum, Required Vote. A majority of the directors shall constitute a quorum for the transaction of business at any meeting of the Board, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board, except as may be otherwise specifically provided by law, the Certificate of Incorporation or these Bylaws. If a quorum shall not be present at any meeting, a majority of the directors present may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

Section 4.5 Consent In Lieu of Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board or any committee thereof may be taken without a meeting if a written consent shall be signed by all members of the Board or committee and the writing or writings are filed with the minutes of proceedings of the Board or committee.

ARTICLE V.
COMMITTEES OF DIRECTORS

Section 5.1 Establishment; Standing Committees. Except as restricted by the Certificate of Incorporation, the Board may by resolution establish, name or dissolve one or more committees, each committee to consist of one or more of the directors. Each committee shall keep regular minutes of its meetings and report the same to the Board when required.

Section 5.2 Available Powers. Any committee established pursuant to Section 5.1 hereof, but only to the extent provided in the resolution of the Board establishing such committee or otherwise delegating specific power and authority to such committee and as limited by law, the certificate of incorporation and these Bylaws, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Company, and may authorize the seal of the Company to be affixed to all papers which may require it. Without limiting the foregoing, such committee may, but only to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted by the Board as provided in Section 151(a) of the General Corporation Law of the State of Delaware, fix any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the Company or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the Company.

Section 5.3 Unavailable Powers. No committee of the Board shall have the power or authority to amend the Certificate of Incorporation (except in connection with the issuance of capital stock as provided in the previous section); adopt an agreement of merger or consolidation; recommend to the stockholders the sale, lease or exchange of all or substantially all of the Company's property and assets, a dissolution of the Company or a revocation of such a dissolution; amend the Bylaws of the Company; or, unless the resolution establishing such committee or the certificate of incorporation expressly so provides, declare a dividend, authorize the issuance of stock or adopt a certificate of ownership and merger.

Section 5.4 Alternate Members. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of such committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member.

Section 5.5 Procedures. Time, place and notice, if any, of meetings of a committee shall be determined by such committee. At meetings of a committee, a majority of the number of members designated by the Board shall constitute a quorum for the transaction of business. The act of a majority of the members present at any meeting at which a quorum is present shall be the act of the committee, except as otherwise specifically provided by law, the Certificate of Incorporation or these Bylaws. If a quorum is not present at a meeting of a committee, the members present may adjourn the meeting from time to time, without notice other than an announcement at the meeting, until a quorum is present.

ARTICLE VI.
OFFICERS

Section 6.1 Elected Officers. The Board shall elect a president, a treasurer and a Secretary (collectively, the ***"Required Officers"***) having the respective duties enumerated below and may elect such other officers having the titles and duties set forth below which are not reserved for the Required Officers or such other titles and duties as the Board may by resolution from time to time establish:

6.1.1 Chairman of the Board. The chairman of the board, or in his absence, the president, shall preside when present at all meetings of the stockholders and the Board. The chairman of the board shall advise and counsel the president and other officers and shall exercise such powers and perform such duties as shall be assigned to or required of him from time to time by the Board or these Bylaws. The chairman of the board may execute bonds, mortgages and other contracts requiring a seal under the seal of the Company, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board to some other officer or agent of the Company. The chairman of the board may delegate all or any of his powers or duties to the president, if and to the extent deemed by the chairman of the board to be desirable or appropriate.

6.1.2 President. The president shall be the chief executive officer of the Company, shall have general and active management of the business of the Company and shall see that all orders and resolutions of the Board are carded into effect. In the absence of the chairman of the board or in the event of his inability or refusal to act, the president shall perform the duties and exercise the powers of the chairman of the board.

6.1.3 Vice Presidents. In the absence of the president or in the event of his inability or refusal to act, the vice president (or in the event there be more than one vice president, the vice presidents in the order designated by the Board, or in the absence of any designation, then in the order of their election or appointment) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The vice presidents shall perform such other duties and have such other powers as the Board may from time to time prescribe.

6.1.4 Secretary. The secretary shall attend all meetings of the stockholders, the Board and (as required) committees of the Board and shall record all the proceedings of such meetings in books to be kept for that purpose. He shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board and shall perform such other duties as may be prescribed by the Board or the president. He shall have custody of the corporate seal of the Company and he, or an assistant secretary, shall have authority to affix the same to any instrument requiring it, and when so affixed, it may be attested by his signature or by the signature of such assistant secretary. The Board may give general authority to any other officer to affix the seal of the Company and to attest the affixing thereof by his signature.

6.1.5 Assistant Secretaries. The assistant secretary, or if there be more than one, the assistant secretaries in the order determined by the Board (or if there be no such

determination, then in the order of their election or appointment) shall, in the absence of the secretary or in the event of his inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the Board may from time to time prescribe.

6.1.6 Treasurer. Unless the Board by resolution otherwise provides, the treasurer shall be the chief accounting and financial officer of the Company. The Treasurer shall have the custody of the corporate funds and securities, shall keep full and accurate accounts of receipts and disbursements in books belonging to the Company and shall deposit all moneys and other valuable effects in the name and to the credit of the Company in such depositories as may be designated by the Board. He shall disburse the funds of the Company as may be ordered by the Board, taking proper vouchers for such disbursements, and shall render to the president and the Board, at its regular meetings, or when the Board so requires, an account of all his transactions as treasurer and of the financial condition of the Company.

6.1.7 Assistant Treasurers. The assistant treasurer, or if there shall be more than one, the assistant treasurers in the order determined by the Board (or if there be no such determination, then in the order of their election or appointment) shall, in the absence of the treasurer or in the event of his inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the Board may from time to time prescribe.

6.1.8 Divisional Officers. Each division of the Company, if any, may have a president, secretary, treasurer or controller and one or more vice presidents, assistant secretaries, assistant treasurers and other assistant officers. Any number of such offices may be held by the same person. Such divisional officers will be appointed by, report to and serve at the pleasure of the Board and such other officers that the Board may place in authority over them. The officers of each division shall have such authority with respect to the business and affairs of that division as may be granted from time to time by the Board, and in the regular course of business of such division may sign contracts and other documents in the name of the division where so authorized; provided that in no case and under no circumstances shall an officer of one division have authority to bind any other division of the Company except as necessary in the pursuit of the normal and usual business of the division of which he is an officer.

Section 6.2 Election. All elected officers shall serve until their successors are duly elected and qualified or until their earlier death, disqualification, retirement, resignation or removal from office.

Section 6.3 Appointed Officers. The Board may also appoint or delegate the power to appoint such other officers, assistant officers and agents, and may also remove such officers and agents or delegate the power to remove same, as it shall from time to time deem necessary, and the titles and duties of such appointed officers may be as described in Section 6.1 hereof for elected officers; provided that the officers and any officer possessing authority over or responsibility for any functions of the Board shall be elected officers.

Section 6.4 Multiple Officeholders, Stockholder and Director Officers. Any number of offices may be held by the same person, unless the certificate of incorporation or these Bylaws

otherwise provide. Officers need not be stockholders or residents of the State of Delaware. Officers, such as the chairman of the board, possessing authority over or responsibility for any function of the Board must be directors.

Section 6.5 Compensation, Vacancies. The compensation of elected officers shall be set by the Board. The Board shall also fill any vacancy in an elected office. The compensation of appointed officers and the filling of vacancies in appointed offices may be delegated by the Board to the same extent as permitted by these Bylaws for the initial filling of such offices.

Section 6.6 Additional Powers and Duties. In addition to the foregoing especially enumerated powers and duties, the several elected and appointed officers of the Company shall perform such other duties and exercise such further powers as may be provided by law, the certificate of incorporation or these Bylaws or as the Board may from time to time determine or as may be assigned to them by any competent committee or superior officer.

Section 6.7 Removal. Any officer may be removed, either with or without cause, by a majority of the directors at the time in office, at any regular or special meeting of the Board.

ARTICLE VII.
SHARE CERTIFICATES

Section 7.1 Entitlement to Certificates. Every holder of the capital stock of the Company, unless and to the extent the Board by resolution provides that any or all classes or series of stock shall be uncertificated, shall be entitled to have a certificate, in such form as is approved by the Board and conforms with applicable law, certifying the number of shares owned by him.

Section 7.2 Multiple Classes of Stock. If the Company shall be authorized to issue more than one class of capital stock or more than one series of any class, a statement of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualification, limitations or restrictions of such preferences and/or rights shall, unless the Board shall by resolution provide that such class or series of stock-shall be uncertificated be set forth in full or summarized on the face or back of the certificate which the Company shall issue to represent such class or series of stock; provided that, to the extent allowed by law, in lieu of such statement, the face or back of such certificate may state that the Company will furnish a copy of such statement without charge to each requesting stockholder.

Section 7.3 Signatures. Each certificate representing capital stock of the Company shall be signed by or in the name of the Company by (1) the chairman of the board, the president or a vice president; and (2) the treasurer, an assistant treasurer, the secretary or an assistant secretary of the Company. The signatures of the officers of the Company may be facsimiles. In case any officer who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to hold such office before such certificate is issued, it may be issued by the Company with the same effect as if he held such office on the date of issue.

Section 7.4 Issuance and Payment. Subject to the provisions of the law, the certificate of incorporation or these Bylaws, shares may be issued for such consideration and to such persons as the Board may determine from time to time. Shares may not be issued until the full amount of the consideration has been paid, unless upon the face or back of each certificate issued to represent any partly paid shares of capital stock there shall have been set forth the total amount of the consideration to be paid therefor and the amount paid thereon up to and including the time said certificate is issued.

Section 7.5 Lost Certificates. The Board may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Company alleged to have been lost, stolen or destroyed upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the Company a bond in such sum as it may direct as indemnity against any claim that may be made against the Company with respect to the certificate alleged to have been lost, stolen or destroyed.

Section 7.6 Transfer of Stock. Upon surrender to the Company or its transfer agent, any, of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer and of the payment of all taxes applicable to the transfer of said shares, the Company shall be obligated to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books; provided, however, that the Company shall not be so obligated unless such transfer was made in compliance with applicable state and federal securities laws.

Section 7.7 Registered Stockholders. The Company shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, vote and be held liable for calls and assessments and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any person other than such registered owner, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

ARTICLE VIII.
INDEMNIFICATION

Section 8.1 General. The Company shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company), by reason of the fact that he is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or

proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, have reasonable cause to believe that his conduct was unlawful.

Section 8.2 Actions by or in the Right of the Company. The Company shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture or trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Company unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 8.3 Indemnification Against Expenses. To the extent that a present or former director or officer of the Company has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Sections 8.1 and 8.2 hereof, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 8.4 Board Determinations. Any indemnification under Sections 8.1 and 8.2 hereof (unless ordered by a court) shall be made by the Company only as authorized in the specific ease upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in Sections 8.1 and 8.2 hereof. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (1) by a majority vote of the directors who were not parties to such action, suit or proceeding, even though less than a quorum, or (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (3) if there are no such disinterested directors or if such directors so direct, by independent legal counsel in a written opinion, or (4) by the stockholders.

Section 8.5 Advancement of Expenses. Expenses incurred by an officer or director in defending a civil or criminal action, suit or proceeding may be paid by the Company in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Company as authorized by law or in this section. Such expenses incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the Company deems appropriate.

Section 8.6 Nonexclusive. The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall not be deemed exclusive of any other rights to which any director, officer, employee or agent of the Company seeking indemnification or advancement of expenses may be entitled under any other Bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, and shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent of the Company and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 8.7 Insurance. The Company may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person's status as such, whether or not the Company would have the power to indemnify such person against such liability under the provisions of the statutes, the Certificate of Incorporation or this section.

Section 8.8 Certain Definitions. For purposes of this Section 8, (a) references to ***"the Company"*** shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, mast or other enterprise, shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued; (b) references to ***"fines"*** shall include any excise taxes assessed on a person with respect to an employee benefit plan; and (c) references to ***"serving at the request of the Company"*** shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to any employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner ***"not opposed to the best interests of the Company"*** as referred to in this section.

Section 8.9 Change in Governing Law. In the event of any amendment or addition to Section 145 of the General Corporation Law of the State of Delaware or the addition of any other section to such law which shall limit indemnification rights thereunder, the Company shall, to the extent permitted by the General Corporation Law of the State of Delaware, indemnify to the fullest extent authorized or permitted hereunder, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (including an action by or in the right of the corporation), by reason of the fact that he is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee

or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding.

ARTICLE IX.
INTERESTED DIRECTORS, OFFICERS AND STOCKHOLDERS

Section 9.1 Validity. Any contract or other transaction between the Company and any of its directors, officers or stockholders (or any corporation or firm in which any of them are directly or indirectly interested) shall be valid for all purposes notwithstanding the presence of such director, officer or stockholder at the meeting authorizing such contract or transaction, or his participation or vote in such meeting or authorization.

Section 9.2 Disclosure, Approval. The foregoing shall, however, apply only if the material facts of the relationship or the interest of each such director, officer or stockholder is known or disclosed:

(A) to the Board and it nevertheless in good faith authorizes or ratifies the contract or transaction by a majority of the directors present, each such interested director to be counted in determining whether a quorum is present but not in calculating the majority necessary to carry the vote; or

(B) to the stockholders and they nevertheless in good faith authorize or ratify the contract or transaction by a majority of the shares present, each such interested person to be counted for quorum and voting purposes; or

(C) the contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified or ratified by the Board, a committee or the stockholders.

Section 9.3 Nonexelusive. This provision shall not be construed to invalidate any contract or transaction which would be valid in the absence of this provision.

ARTICLE X.
MISCELLANEOUS

Section 10.1 Place of Meetings. All stockholders, directors and committee meetings shall be held at such place or places, within or without the State of Delaware, as shall be designated from time to time by the Board or such committee and stated in the notices thereof. If no such place is so designated, said meetings shall be held at the principal business office of the Company.

Section 10.2 Fixing Record Dates.

(a) In order that the Company may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date shall not be more than sixty (60) nor

less than ten (10) days prior to any such action. If no record date is fixed by the Board, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day notice is given or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

(b) In order that the Company may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which date shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board. If no record date has been fixed by the Board, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board is otherwise required, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Company by delivery to its registered office in the State of Delaware, its principal place of business, or an officer or agent of the Company having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Company's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board and prior action by the Board is required, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board adopts the resolution taking such prior action.

(c) In order that the Company may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any fights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

Section 10.3 Means of Giving Notice. Whenever under law, the certificate of incorporation or these Bylaws, notice is required to be given to any director or stockholder, such notice may be given in writing and delivered personally, through the United States mail, by a recognized express delivery service (such as Federal Express) or by means of telegram, telex or facsimile transmission, addressed to such director or stockholder at his address or telex or facsimile transmission number, as the case may be, appearing on the records of the Company, with postage and fees thereon prepaid. Such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail or with an express delivery service or when transmitted, as the ease may be. Notice of any meeting of the Board may be given to a director by telephone and shall be deemed to be given when actually received by the director.

Section 10.4 Waiver of Notice. Whenever any notice is required to be given under law, the Certificate of Incorporation or these Bylaws, a written waiver of such notice, signed before or

after the date of such meeting by the person or persons entitled to said notice, shall be deemed equivalent to such required notice. All such waivers shall be filed with the corporate records. Attendance at a meeting shall constitute a waiver of notice of such meeting, except where a person attends for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

Section 10.5 Attendance via Communications Equipment. Unless otherwise restricted by law, the certificate of incorporation or these Bylaws, members of the Board, any committee thereof or the stockholders may hold a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can effectively communicate with each other. Such participation in a meeting shall constitute presence in person at the meeting, except where a person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

Section 10.6 Dividends. Dividends on the capital stock of the Company, paid in cash, property, or securities of the Company and as may be limited by applicable law and applicable provisions of the certificate of incorporation (if any), may be declared by the Board at any regular or special meeting.

Section 10.7 Reserves. Before payment of any dividend, there may be set aside out of any funds of the Company available for dividends such sum or sums as the Board from time to time, in its absolute discretion, think proper as a reserve or reserves to meet contingencies, for equalizing dividends, for repairing or maintaining any property of the Company or for such other purpose as the Board shall determine to be in the best interest of the Company; and the Board may modify or abolish any such reserve in the manner in which it was created.

Section 10.8 Reports to Stockholders. The Board shall present at each annual meeting of stockholders, and at any special meeting of stockholders when called for by vote of the stockholders, a statement of the business and condition of the Company.

Section 10.9 Contracts and Negotiable Instruments. Except as otherwise provided by law or these Bylaws, any contract or other instrument relative to the business of the Company may be executed and delivered in the name of the Company and on its behalf by the chairman of the board or the president; and the Board may authorize any other officer or agent of the Company to enter into any contract or execute and deliver any contract in the name and on behalf of the Company, and such authority may be general or confined to specific instances as the Board may by resolution determine. All bills, notes, checks or other instruments for the payment of money shall be signed or countersigned by such officer, officers, agent or agents and in such manner as are permitted by these Bylaws and/or as, from time to time, may be prescribed by resolution (whether general or special) of the Board. Unless authorized so to do by these Bylaws or by the Board, no officer, agent or employee shall have any power or authority to bind the Company by any contract or engagement, or to pledge its credit, or to render it liable pecuniarily for any purpose or to any amount.

Section 10.10 Fiscal Year. The fiscal year of the Company shall be fixed by resolution of the Board.

Section 10.11 Seal. The seal of the Company shall be in such form as shall from time to time be adopted by the Board. The seal may be used by causing it or a facsimile thereof to be impressed, affixed or otherwise reproduced.

Section 10.12 Books and Records. The Company shall keep correct and complete books and records of account and shall keep minutes of the proceedings of its stockholders, Board and committees and shall keep at its registered office or principal place of business, or at the office of its transfer agent or registrar, a record of its stockholders, giving the names and addresses of all stockholders and the number and class of the shares held by each.

Section 10.13 Resignation. Any director, committee member, officer or agent may resign by giving written notice to the chairman of the board, the president or the secretary. The resignation shall take effect at the time specified therein, or immediately if no time is specified. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 10.14 Surety Bonds. Such officers and agents of the Company (if any) as the president or the Board may direct, from time to time, shall be bonded for the faithful performance of their duties and for the restoration to the Company, in case of their death, resignation, retirement, disqualification or removal from office, of all books, papers, vouchers, money and other property of whatever kind in their possession or under their control belonging to the Company, in such amounts and by such surety companies as the president or the Board may determine. The premiums on such bonds shall be paid by the Company and the bonds so furnished shall be in the custody of the Secretary.

Section 10.15 Proxies in Respect of Securities of Other Corporations. The chairman of the board, the president, any vice president or the secretary may from time to time appoint an attorney or attorneys or an agent or agents for the Company to exercise, in the name and on behalf of the Company, the powers and rights which the Company may have as the holder of stock or other securities in any other corporation to vote or consent in respect of such stock or other securities, and the chairman of the board, the president, any vice president or the secretary may instruct the person or persons so appointed as to the manner of exercising such powers and rights; and the chairman of the board, the president, any vice president or the secretary may execute or cause to be executed, in the name and on behalf of the Company and under its corporate seal or otherwise, all such written proxies or other instruments as he may deem necessary or proper in order that the Company may exercise such powers and fights.

Section 10.16 Amendments. These Bylaws may be altered, amended, repealed or replaced by the stockholders, or by the Board when such power is conferred upon the Board by the certificate of incorporation, at any annual stockholders meeting or annual or regular meeting of the Board, or at any special meeting of the stockholders or of the Board if notice of such alteration, amendment, repeal or replacement is contained in the notice of such special meeting. If the power to adopt, amend, repeal or replace these Bylaws is conferred upon the Board by the certificate of incorporation, the power of the stockholders to so adopt, amend, repeal or replace these Bylaws shall not be divested or limited thereby.

FORM OF A WARRANT

EXHIBIT B-1

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR SATISFACTORY ASSURANCES TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED WITH RESPECT TO SUCH SALE, OFFER, PLEDGE OR HYPOTHECATION.

WARRANT TO PURCHASE COMMON STOCK

of

Actinium Pharmaceuticals, Inc.

Void after _____**, 2013**

This certifies that, for value received, _____, a _____, or its registered assigns ("Holder") is entitled, subject to the terms set forth below, to purchase from **Actinium Pharmaceuticals, Inc.** (the "Company"), a Delaware corporation, _____ (_____) shares of the Common Stock of the Company (the "Shares"), upon surrender hereof, at the principal office of the Company referred to below and simultaneous payment therefor in lawful money of the United States or otherwise as hereinafter provided, at the Exercise Price as set forth in Section 2 below. This Warrant is issued pursuant to the Unit Purchase Agreement dated as of _____, 2012, among the Company and certain Purchasers named therein (the "Purchase Agreement"). The number, character and Exercise Price of such shares of Common Stock (the "Common Stock") are subject to adjustment as provided below. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein.

Following the Pubco Transaction (as defined in the Purchase Agreement), references herein to the Shares of Common Stock shall be deemed to refer to shares of common stock of the Company's publicly traded successor in the Pubco Transaction ("Pubco"), and references herein to the Company shall be deemed to refer to Pubco.

1. **Term of Warrant**. Subject to the terms and conditions set forth herein, this Warrant shall be exercisable, in whole or in part, during the term commencing _____,

2012 (the "Warrant Issue Date"), and ending at 5:00 p.m., Eastern Time on _____, **2013** (the 120th day after the date of issuance), and shall be void thereafter.

2. **Exercise Price**. The Exercise Price per share of Common Stock at which this Warrant may be exercised shall be equal to **$0.55** per share as adjusted from time to time pursuant to Section 10 below (the "Exercise Price").

3. **Exercise of Warrant**.

(a) The purchase rights represented by this Warrant are exercisable by the Holder in whole or in part at any time, or from time to time, by the surrender of this Warrant and the Notice of Exercise annexed hereto duly completed and executed on behalf of the Holder, at the office of the Company (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company), upon payment (i) in cash or by check acceptable to the Company, (ii) by cancellation by the Holder of then outstanding indebtedness of the Company to the Holder, or (iii) by a combination of (i) and (ii), of the purchase price of the shares to be purchased.

(b) This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above and payment of the Exercise Price, and the person entitled to receive the shares of Common Stock issuable upon such exercise shall be treated for all purposes as the holder of record of such shares as of the close of business on such date (the "Exercise Date"). As promptly as practicable on or after the Exercise Date, but in no event more than three (3) business days thereafter (the "Warrant Share Delivery Date"), the Company at its expense shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of shares issuable upon such exercise; provided, however, following the Pubco Transaction (as defined in the Purchase Agreement), this provision shall require certificates for Shares purchased hereunder to be transmitted by the transfer agent of Pubco to the Holder on the Exercise Date by crediting the account of the Holder's prime broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission ("DWAC") system. In the event that this Warrant is exercised in part, the Company at its expense will execute and deliver a new Warrant of like tenor exercisable for the number of shares for which this Warrant may then be exercised.

(c) Following the Pubco Transaction, in addition to any other rights available to the Holder, if Pubco fails to cause its transfer agent to deliver to the Holder a certificate or certificates representing the Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) Shares to deliver in satisfaction of a sale by the Holder of the Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then Pubco shall (1) pay in cash to the Holder the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Shares so purchased exceeds (y) the amount obtained by multiplying (A) the number of Shares that the Company was required to deliver to the Holder in connection with the exercise at issue, by (B) the price at which the sell order giving rise to such purchase obligation was executed, and (2) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Shares for which such exercise was not

honored or deliver to the Holder the number of shares of Common Stock that would have been issued had Pubco timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (1) of the immediately preceding sentence Pubco shall be required to pay the Holder $1,000. The Holder shall provide Pubco written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of Pubco, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to Pubco's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

4. **No Fractional Shares or Scrip**. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

5. **Replacement of Warrant**. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of loss, theft, or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

6. **Rights of Shareholders**. Until Holder exercises this Warrant and the Company issues Holder shares of Common Stock purchasable upon the exercise hereof, as provided herein, Holder shall not be entitled to vote or receive dividends or be deemed the holder of Common Stock or any other securities of the Company that may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent or assert dissenter's rights with respect to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or otherwise.

7. **Transfer of Warrant**.

(a) Warrant Register. The Company will maintain a register (the "Warrant Register") containing the names and addresses of the Holder or Holders. Any Holder of this Warrant or any portion thereof may change his address as shown on the Warrant Register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be delivered or given by mail to such Holder as shown on the Warrant Register and at the address shown on the Warrant Register. Until this Warrant is transferred on the Warrant Register of the Company, the Company may treat the

Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary.

(b) Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 7(a) above, issuing the Common Stock or other securities then issuable upon the exercise of this Warrant, exchanging this Warrant, replacing this Warrant, or any or all of the foregoing. Thereafter, any such registration, issuance, exchange, or replacement, as the case may be, shall be made at the office of such agent.

(c) Transferability and Non-negotiability of Warrant. This Warrant may not be transferred or assigned in whole or in part without compliance with the terms of this Warrant and all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, if such are requested by the Company).

(d) Compliance with Securities Laws.

(i) Holder understands that the Warrant and the Shares are characterized as "restricted securities" under the Securities Act of 1933, as amended (the "1993 Act") inasmuch as they are being acquired from the Company in a transaction not involving a public offering, and that under the 1933 Act and applicable regulations thereunder, such securities may be resold without registration under the 1933 Act only in certain limited circumstances. In this connection, Holder represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the 1933 Act. Holder understands that the Company is under no obligation to register any of the securities sold hereunder except as provided in Section 11 hereof. Holder understands that no public market now exists for any of the Warrants or the Shares and that it is uncertain whether a public market will ever exist for the Warrants or the Shares.

(ii) This Warrant and all certificates for the Shares issued upon exercise hereof shall be stamped or imprinted with a legend in substantially the following form (in addition to any legend required by state securities laws):

> "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THE SHARES MAY NOT BE SOLD OR OFFERED FOR SALE IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SHARES UNDER SUCH ACT, (B) A "NO ACTION" LETTER OF THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH SALE OR OFFER OR (C) SATISFACTORY ASSURANCES TO THE CORPORATION THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR OFFER."

(e) Disposition of Holder's Rights.

(i) In no event will the Holder make a disposition of any of its rights to acquire Shares under this Warrant and/or of any of the Shares issuable upon exercise of any such rights unless and until (A) it shall have notified the Company of the proposed disposition, (B) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Holder) satisfactory to the Company and its counsel to the effect that (1) appropriate action necessary for compliance with the 1933 Act has been taken, or (2) an exemption from the registration requirements of the 1933 Act is available, and (C) if the disposition involves the sale of such rights or such Shares issuable upon exercise of such rights, it shall have offered to the Company, pursuant to Section 7(f) hereunder, such rights to acquire Shares or Shares issuable and upon exercise of such rights, as the case may be.

(ii) The restrictions imposed under this Section 7(e) shall terminate as to any of the Shares when (A) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (B) such security may be sold without registration in compliance with Rule 144 under the 1933 Act, or (C) a letter shall have been issued to the Holder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Holder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Holder or holder of Shares then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such Shares not bearing any restrictive legend.

(f) Company's Right of First Refusal. Subject to the foregoing, each time Holder proposes to sell any rights to purchase Shares hereunder or any of the Shares issuable upon exercise of such rights (the "Offered Shares"), Holder shall deliver a notice (a "Notice") to the Company stating, (A) its bona fide intention to sell such Offered Shares, (B) the number of such Offered Shares being offered, and (C) the price and terms, if any, upon which it proposes to offer such Offered Shares. Within twenty (20) days after receipt of the Notice (the "Notice Period"), the Company may elect by written notice to purchase or obtain, at the price and on the terms specified in the Notice, the number of Offered Shares as specified in the Notice, subject to applicable law with respect to issuer redemptions of securities. If the Company does not elect to purchase all of the Offered Shares, the Holder may, during the ninety (90) day period following the expiration of the Notice Period, offer the remaining unsubscribed portion of such Offered Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Holder does not enter into an agreement for the sale of the Offered Shares within such period, or if such agreement is not consummated within sixty (60) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Offered Shares shall not be offered unless first reoffered to the Company in accordance herewith. Notwithstanding anything herein to the contrary, this provision shall become null and void and of no further force or effect immediately upon consummation of the Pubco Transaction.

(g) Market Stand-Off.

(i) In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Company's initial public offering, Holder shall not sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or otherwise agree to engage in any of the foregoing transactions with respect to, any shares of Common Stock to be issued upon exercise hereof, without the prior written consent of the Company or its lead managing underwriter(s). Such restriction (the "Market Stand-Off") shall be in effect for such period of time from and after the effective date of the final prospectus for the offering as may be requested by the Company or such underwriter(s). In no event, however, shall such period exceed one hundred eighty (180) days, and the Market Stand-Off shall in all events terminate two (2) years after the effective date of the Company's initial public offering.

(ii) Holder shall be subject to the Market Stand-Off only if the officers and directors of the Company are also subject to similar restrictions.

(iii) Any new, substituted or additional securities which are by reason of any recapitalization or reorganization of the Company distributed with respect to the shares of Common Stock to be issued upon exercise hereof shall be immediately subject to the Market standoff, to the same extent the shares of Common Stock to be issued upon exercise hereof are at such time covered by such provisions.

(iv) In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the shares of Common Stock to be issued upon exercise hereof until the end of the applicable stand-off period.

(h) Any entity to whom Holder transfers any right to purchase the Shares pursuant to this Warrant or any of the Shares issuable upon the exercise of such right shall become a "Holder" for purposes of this Section 7.

8. **Reservation of Stock**. The Company covenants that during the term this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of this Warrant and, from time to time, will take all steps necessary to amend its Fifth Amended and Restated Certificate of Incorporation (the "Certificate") as the same may be amended from time to time to provide sufficient reserves of shares of Common Stock issuable upon exercise of the Warrant. The Company further covenants that all shares that may be issued upon the exercise of rights represented by this Warrant, upon exercise of the rights represented by this Warrant and payment of the Exercise Price, all as set forth herein, will be free from all taxes, liens, and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously or otherwise specified herein). The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the

duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

9. **Amendments**.

(a) This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the holder(s) of greater than 50% of unexercised Shares then issuable pursuant to all Warrants issued pursuant to the Purchase Agreement, provided that no part of Section 12 hereof (Placement Agent's Fees and Expenses) may be amended or waived without the written consent of the Placement Agent (as defined in the Purchase Agreement), in addition to the foregoing. Any amendment, modification or waiver effected in accordance with this Section 9 shall be binding upon each future holder of the Warrant and the Company.

(b) No waivers of or exceptions to any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

10. **Adjustments**. The Exercise Price and the number of shares purchasable hereunder are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall, by reclassification of securities or otherwise, change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 10.

(b) Dividend, Split, Subdivision or Combination of Shares. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall declare a dividend or make a distribution on the outstanding Common Stock payable in shares of its capital stock, or split, subdivide or combine the securities as to which purchase rights under this Warrant exist into a different number of securities of the same class, the Exercise Price for such securities shall be proportionately decreased in the case of a dividend, split or subdivision or proportionately increased in the case of a combination.

(c) Anti-Dilution.

i. Definitions. For the purposes of this Section 10(c), the following definitions shall apply:

1. "*Applicable Per Share Stated Value of the Series E Preferred Stock*" means $0.261 per share, subject to appropriate and proportionate adjustment for stock dividends payable in shares of , stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to the Series E Preferred Stock (as defined in the Purchase Agreement).

2. "*Common Stock Equivalent*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

3. "*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

4. "*Qualified Initial Public Offering*" means the closing of the Company's initial direct public offering or underwritten public offering on a firm commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company (a) in which (i) the Company actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Company is listed on a national securities exchange.

ii. Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. For so long as there are any Warrants outstanding, if and whenever at any time and from time to time after the Warrant Issue Date, as applicable, the Company shall issue, or is, in accordance with Sections 10(c)(ii)(1) through 10(c)(ii)(7) of this Section 10, deemed to have issued, any shares of Common Stock for no consideration or a consideration per share less than the Exercise Price, as applicable, then, forthwith upon such issue or sale, the Warrants shall be subject to a proportional adjustment determined by multiplying such Warrant Exercise Price by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Company for the total number of such additional shares of Common Stock so issued or deemed to be issued would purchase at the Warrant Exercise Price, as applicable, in effect immediately prior to such issuance; and

N(2) = the number of such additional shares of Common Stock so issued or deemed to be issued.

For purposes of this Section 10(c)(ii), the following Sections 10(c)(ii)(1) to 10(c)(ii)(5) shall be applicable:

1. Consideration for Shares. For purposes of this Section 10(c)(ii), the consideration received by the Company for the issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

A. insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Company therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

B. insofar as such consideration consists of property other than cash, the value of such property received by the Company shall be deemed to be the fair value of such property at the time of such issuance as determined in good faith by the Board, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith;

C. insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock issued or deemed issued; and

D. in the event that Common Stock or Common Stock Equivalents shall be issued in connection with the issue of other securities of the Company, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board.

2. Issuance of Common Stock Equivalents. The issuance of any Common Stock Equivalents shall be deemed an issuance of the maximum

number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents.

3. Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Company for any shares of Common Stock issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Company for the issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Company upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

4. Record Date. In case the Company shall establish a record date with respect to the holders of any class or series of the Company's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the issuance of the shares of Common Stock deemed to have been issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5. Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section 10(c)(ii) shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

A. the issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) to employees, consultants, officers or directors of the Company or any Affiliate or Subsidiary of the Company pursuant to a stock option plan or restricted stock plan or arrangement, which issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

B. the issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

C. the issuance of shares of Common Stock in a Qualified Initial Public Offering or pursuant to the Pubco Transaction;

D. the issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates (as defined in the Purchase Agreement) and are approved by a majority of the entire Board;

E. the issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and that are approved a majority of the entire Board;

F. the issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Company's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board; or

G. the issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Company or any of its Affiliates to investment bankers, placement agents or advisors in connection with the issuance of Series E Preferred Stock and the Units (as defined in the Purchase Agreement).

(d) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 10, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request, at any time, of any such holder, furnish or cause to be furnished to such holder a like certificate setting forth: (i) such adjustments and readjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

11. **Registration Rights.** The shares of Common Stock issuable upon exercise of this Warrant shall have the registration rights set forth in the 2012 Unit Investor Rights Agreement attached as an exhibit to the Purchase Agreement.

12. **Placement Agent's Fees and Expenses**. Holder understands that, upon any exercise of this Warrant, the Placement Agent (as defined in the Purchase Agreement) shall be entitled to receive a commission equal to 10% and a non-accountable expense allowance equal to 2% of the aggregate Exercise Price paid by Holder upon such exercise. The Company shall direct the Holder to make such commission and expense payment directly to the Placement Agent and the Holder shall comply with such direction.

13. **Reclassification; Reorganization; Merger.**

In case of any capital reorganization, other than in the cases referred to in Sections 10(a) and 10(b) hereof, or the consolidation or merger of the Company with or into another corporation, including without limitation, the Pubco Transaction (other than a merger or consolidation in which the Company is the continuing corporation and which does not result in any reclassification of the outstanding shares of Common Stock or the conversion of such outstanding shares of Common Stock into shares of other stock or other securities or property), or in the case of any sale, lease, or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety (such actions being hereinafter collectively referred to as "Reorganizations"), there shall thereafter be deliverable upon exercise of this Warrant (in lieu of the number of Shares theretofore deliverable) the number of shares of stock or other securities or property to which a holder of the respective number of Shares which would otherwise have been deliverable upon the exercise of this Warrant would have been entitled upon such Reorganization if this Warrant had been exercised in full immediately prior to such Reorganization. In case of any Reorganization, appropriate adjustment, as determined in good faith by the Board of Directors of the Company, shall be made in the application of the provisions herein set forth with respect to the rights and interests of the Holder so that the provisions set forth herein shall thereafter be applicable, as nearly as possible, in relation to any shares or other property thereafter deliverable upon exercise of this Warrant. Any such adjustment shall be made by, and set forth in, a supplemental agreement between the Company, or any successor thereto (including, without limitation, Pubco) and the Holder, with respect to this Warrant, and shall for all purposes hereof conclusively be deemed to be an appropriate adjustment. The Company shall not effect any such Reorganization unless, upon or prior to the consummation thereof, the successor corporation, or, if the Company shall be the surviving corporation in any such Reorganization and is not the issuer of the shares of stock or other securities or property to be delivered to holders of shares of the Common Stock outstanding at the effective time thereof then such issuer (including, without limitation, Pubco), shall assume by written instrument the obligation to deliver to the Holder such shares of stock, securities, cash, or other property as such Holder shall be entitled to purchase in accordance with the foregoing provisions. In the event of sale, lease, or conveyance or other transfer of all or substantially all of the assets of the Company as part of a plan for liquidation of the Company, all rights to exercise this Warrant shall terminate thirty (30) days after the Company gives written notice to the Holder that such sale or conveyance or other transfer has been consummated.

The above provisions of this Section 12 shall similarly apply to successive reclassifications and changes of shares of Common Stock and to successive consolidations, mergers, sales, leases, or conveyances.

14. **Notice of Certain Events.**

In case at any time the Company shall propose:

(a) to pay any dividend or make any distribution on shares of Common Stock in shares of Common Stock or make any other distribution (other than regularly scheduled cash dividends which are not in a greater amount per share than the most recent such cash dividend) to all holders of Common Stock; or

(b) to issue any rights, warrants, or other securities to all holders of Common Stock entitling them to purchase any additional shares of Common Stock or any other rights, warrants, or other securities; or

(c) to effect any reclassification or change of outstanding shares of Common Stock or any consolidation, merger, sale, lease, or conveyance of property, as described in Section 12 (including, without limitation, the Pubco Transaction); or

(d) to effect any liquidation, dissolution, or winding-up of the Company; or

(e) to take any other action which would cause an adjustment to the Exercise Price;

then, and in any one or more of such cases, the Company shall give written notice thereof by registered mail, postage prepaid, to the Holder at the Holder's address as it shall appear in the Warrant Register, mailed at least fifteen (15) days prior to: (1) the date as of which the holders of record of shares of Common Stock to be entitled to receive any such dividend, distribution, rights, warrants, or other securities are to be determined, (2) the date on which any such reclassification, change of outstanding shares of Common Stock, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up is expected to become effective and the date as of which it is expected that holders of record of shares of Common Stock shall be entitled to exchange their shares for securities or other property, if any, deliverable upon such reclassification, change of outstanding shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up, or (3) the date of such action which would require an adjustment to the Exercise Price.

15. **Miscellaneous**.

(a) Additional Undertaking. The Holder hereby agrees to take whatever additional action and execute whatever additional documents the Company may deem

necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on either the Holder or the shares of Common Stock issued upon exercise hereof pursuant to the provisions of this Warrant.

(b) Governing Law; Venue. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware without resort to that State's conflict-of-laws rules. Venue for any legal action hereunder shall be in the state or federal courts located in the Borough of Manhattan, New York, New York.

(c) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

(d) Successors and Assigns. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Holder, the Holder's permitted assigns and the legal representatives, heirs and legatees of the Holder's estate, whether or not any such person shall have become a party to this Warrant and have agreed in writing to join herein and be bound by the terms hereof.

(e) Notices. All notices, requests, demands and other communications given or made in accordance with the provisions of this Warrant shall be addressed (i) if to Holder, at such Holder's address, fax number or email address, as furnished to the Company on the signature page to the Purchase Agreement or as otherwise furnished to the Company by the Holder in writing, or (ii) if to the Company, to the attention of the President at such address, fax number or email address furnished to the Holder on the signature page to the Purchase Agreement or as otherwise furnished by the Company in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

[Signatures appear on the following page]

IN WITNESS WHEREOF, **Actinium Pharmaceuticals, Inc.** has caused this Warrant to be executed by its officer thereunto duly authorized.

Dated as of _____, **2012**.

ACTINIUM PHARMACEUTICALS, INC.

By: _____
Jack V. Talley
President and Chief Executive Officer

HOLDER

The Holder has executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed this Warrant in all respects and is bound to purchase the terms thereof as set forth in the Subscription Agreement.

NOTICE OF EXERCISE

To: **Actinium Pharmaceuticals, Inc.**

(1) The undersigned hereby elects to purchase _____ shares of Common Stock of **Actinium Pharmaceuticals, Inc.**, pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price for such shares in full.

(2) In exercising this Warrant, the undersigned hereby confirms and acknowledges that the shares of Common Stock have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), and are restricted securities under the 1933 Act and that the undersigned will not offer, sell, or otherwise dispose of any such shares of Common Stock except under circumstances that will not result in a violation of the 1933 Act or any state securities laws.

(3) Please issue a certificate or certificates representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name _____

Name _____

(4) Please issue a new Warrant for the unexercised portion of the attached Warrant in the name of the undersigned or in such other name as is specified below:

Name _____

Name _____

Date: _____ Signature: _____

FORM OF B WARRANT

EXHIBIT B-2

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR SATISFACTORY ASSURANCES TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED WITH RESPECT TO SUCH SALE, OFFER, PLEDGE OR HYPOTHECATION.

WARRANT TO PURCHASE COMMON STOCK

of

Actinium Pharmaceuticals, Inc.

Void after _____, 2017

This certifies that, for value received, **_____**, a _____, or its registered assigns ("Holder") is entitled, subject to the terms set forth below, to purchase from **Actinium Pharmaceuticals, Inc. (the "Company"), a Delaware corporation,** _____ (_____) shares of the Common Stock of the Company (the "Shares"), upon surrender hereof, at the principal office of the Company referred to below and simultaneous payment therefor in lawful money of the United States or otherwise as hereinafter provided, at the Exercise Price as set forth in Section 2 below. This Warrant is issued pursuant to the Unit Purchase Agreement dated as of _____, 2012, among the Company and certain Purchasers named therein (the "Purchase Agreement"). The number, character and Exercise Price of such shares of Common Stock (the "Common Stock") are subject to adjustment as provided below. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein.

Following the Pubco Transaction (as defined in the Purchase Agreement), references herein to the Shares or Common Stock shall be deemed to refer to shares of common stock of the Company's publicly traded successor in the Pubco transaction ("Pubco"), and references herein to the Company shall be deemed to refer to Pubco.

1. **Term of Warrant**. Subject to the terms and conditions set forth herein, this Warrant shall be exercisable, in whole or in part, during the term commencing **_____, 2012** (the "Warrant Issue Date"), and ending at 5:00 p.m., Eastern Time on the fifth anniversary of the final Subsequent Closing (as defined in the Purchase Agreement), and shall be void thereafter.

2. **Exercise Price**. The Exercise Price per share of Common Stock at which this Warrant may be exercised shall be equal to **$0.825** per share as adjusted from time to time pursuant to Section 10 below (the "Exercise Price").

3. **Exercise of Warrant**.

(a) The purchase rights represented by this Warrant are exercisable by the Holder in whole or in part at any time, or from time to time, by the surrender of this Warrant and the Notice of Exercise annexed hereto duly completed and executed on behalf of the Holder, at the office of the Company (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company), upon payment (i) in cash or by check acceptable to the Company, (ii) by cancellation by the Holder of then outstanding indebtedness of the Company to the Holder, (iii) by a combination of (i) and (ii), of the purchase price of the shares to be purchased or (iv) by cashless exercise as set forth in Section 3(c), below, of the purchase price of the shares to be purchased, except upon a call by the Company.

(b) This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above and payment of the Exercise Price if exercised for cash, and the person entitled to receive the shares of Common Stock issuable upon such exercise shall be treated for all purposes as the holder of record of such shares as of the close of business on such date (the "Exercise Date"). As promptly as practicable on or after the Exercise Date, but in no event more than three (3) business days thereafter (the "Warrant Share Delivery Date"), the Company at its expense shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of shares issuable upon such exercise; provided, however, following the Pubco Transaction (as defined in the Purchase Agreement), this provision shall require certificates for Shares purchased hereunder to be transmitted by the transfer agent of Pubco to the Holder on the Exercise Date by crediting the account of the Holder's prime broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission ("DWAC") system. In the event that this Warrant is exercised in part, the Company at its expense will execute and deliver a new Warrant of like tenor exercisable for the number of shares for which this Warrant may then be exercised.

(c) The Holder, at its option, may exercise this Warrant in a cashless exercise transaction pursuant to this subsection (c) (a "Cashless Exercise"). In order to effect a Cashless Exercise, the Holder shall surrender this Warrant at the principal office of the Company together with an Exercise Form, completed and executed, indicating Holder's election to effect a Cashless Exercise, in which event the Company shall issue Holder a number of shares of Common Stock computed using the following formula:

$$X = Y (A-B)/A$$

where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock for which this Warrant is being Exercised.

A = the Market Price of one (1) share of Common Stock (for purposes of this Section 3(c), where "Market Price," means the Volume Weighted Average Price (as defined herein) of one (1) share of Common Stock during the ten (10) consecutive Trading Day period immediately preceding the Exercise Date.

B = the Exercise Price.

As used herein, the "Volume Weighted Average Price" for any security as of any date means the volume weighted average sale price on The NASDAQ Global Market ("NASDAQ") as reported by, or based upon data reported by, Bloomberg Financial Markets or an equivalent, reliable reporting service mutually acceptable to and hereafter designated by holders of a majority in interest of the Warrants and the Company ("Bloomberg") or, if NASDAQ is not the principal trading market for such security, the volume weighted average sale price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or, if no volume weighted average sale price is reported for such security, then the last closing trade price of such security as reported by Bloomberg, or, if no last closing trade price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security that are listed in the over the counter market by the Financial Industry Regulatory Authority, Inc. or in the "pink sheets" by the Pink OTC Market, Inc. If the Volume Weighted Average Price cannot be calculated for such security on such date in the manner provided above, the volume weighted average price shall be the fair market value as determined in good faith by the Company's Board of Directors. "Trading Day" shall mean any day on which the Common Stock is traded for any period on NASDAQ, or on the principal securities exchange or other securities market on which the Common Stock is then being traded.

For purposes of Rule 144 and sub-section (d)(3)(ii) thereof, it is intended, understood and acknowledged that the Common Stock issued upon Exercise of this Warrant in a Cashless Exercise transaction shall be deemed to have been acquired at the time this Warrant was issued. Moreover, it is intended, understood and acknowledged that the holding period for the Common Stock issued upon Exercise of this Warrant in a Cashless Exercise transaction shall be deemed to have commenced on the date this Warrant was issued.

(d) In the case of a dispute as to the determination of the closing price or the Volume Weighted Average Price of the Company's Common Stock or the arithmetic calculation of the Exercise Price or Market Price, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within four (4) business days of receipt, or deemed receipt, of the Exercise Notice, or other event giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation within two (2) business days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) business days submit via facsimile (i) the disputed determination of the closing price or the Volume Weighted Average Price of the Company's Common Stock to an independent, reputable investment bank selected by the Company and approved by the Holder, which approval shall not

be unreasonably withheld or delayed or (ii) the disputed arithmetic calculation of the Exercise Price, Market Price to the Company's independent, outside accountant, or another accounting firm of national standing selected by the Company. The Company shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than the later of (i) five (5) business days from the time it receives the disputed determinations or calculations or (ii) five (5) business days from the selection of the investment bank and accounting firm, as applicable. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

(e) Following the Pubco Transaction, in addition to any other rights available to the Holder, if Pubco fails to cause its transfer agent to deliver to the Holder a certificate or certificates representing the Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) Shares to deliver in satisfaction of a sale by the Holder of the Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then Pubco shall (1) pay in cash to the Holder the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Shares so purchased exceeds (y) the amount obtained by multiplying (A) the number of Shares that the Company was required to deliver to the Holder in connection with the exercise at issue, by (B) the price at which the sell order giving rise to such purchase obligation was executed, and (2) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would have been issued had Pubco timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (1) of the immediately preceding sentence Pubco shall be required to pay the Holder $1,000. The Holder shall provide Pubco written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of Pubco, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to Pubco's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

4. **No Fractional Shares or Scrip**. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

5. **Replacement of Warrant**. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of loss, theft, or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

6. **Rights of Shareholders**. Until Holder exercises this Warrant and the Company issues Holder shares of Common Stock purchasable upon the exercise hereof, as provided herein, Holder shall not be entitled to vote or receive dividends or be deemed the holder of Common Stock or any other securities of the Company that may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent or assert dissenter's rights with respect to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or otherwise.

7. **Transfer of Warrant**.

(a) Warrant Register. The Company will maintain a register (the "Warrant Register") containing the names and addresses of the Holder or Holders. Any Holder of this Warrant or any portion thereof may change his address as shown on the Warrant Register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be delivered or given by mail to such Holder as shown on the Warrant Register and at the address shown on the Warrant Register. Until this Warrant is transferred on the Warrant Register of the Company, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary.

(b) Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 7(a) above, issuing the Common Stock or other securities then issuable upon the exercise of this Warrant, exchanging this Warrant, replacing this Warrant, or any or all of the foregoing. Thereafter, any such registration, issuance, exchange, or replacement, as the case may be, shall be made at the office of such agent.

(c) Transferability and Non-negotiability of Warrant. This Warrant may not be transferred or assigned in whole or in part without compliance with the terms of this Warrant and all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, if such are requested by the Company).

(d) Compliance with Securities Laws.

(i) Holder understands that the Warrant and the Shares are characterized as "restricted securities" under the 1933 Act inasmuch as they are being acquired from the Company in a transaction not involving a public offering, and that under the Securities Act of 1933, as amended (the "1933 Act") and applicable regulations thereunder, such securities may be resold without registration under the 1933 Act only in certain limited circumstances. In this connection, Holder represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the 1933 Act. Holder understands that the Company is under no obligation to register any of the securities sold hereunder except as

provided in Section 11 hereof. Holder understands that no public market now exists for any of the Warrants or the Shares and that it is uncertain whether a public market will ever exist for the Warrants or the Shares.

(ii) This Warrant and all certificates for the Shares issued upon exercise hereof shall be stamped or imprinted with a legend in substantially the following form (in addition to any legend required by state securities laws):

"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THE SHARES MAY NOT BE SOLD OR OFFERED FOR SALE IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SHARES UNDER SUCH ACT, (B) A "NO ACTION" LETTER OF THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH SALE OR OFFER OR (C) SATISFACTORY ASSURANCES TO THE CORPORATION THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR OFFER."

(e) Disposition of Holder's Rights.

(i) In no event will the Holder make a disposition of any of its rights to acquire Shares under this Warrant and/or of any of the Shares issuable upon exercise of any such rights unless and until (A) it shall have notified the Company of the proposed disposition, (B) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Holder) satisfactory to the Company and its counsel to the effect that (1) appropriate action necessary for compliance with the 1933 Act has been taken, or (2) an exemption from the registration requirements of the 1933 Act is available, and (C) if the disposition involves the sale of such rights or such Shares issuable upon exercise of such rights, it shall have offered to the Company, pursuant to Section 7(f) hereunder, such rights to acquire Shares or Shares issuable and upon exercise of such rights, as the case may be.

(ii) The restrictions imposed under this Section 7(e) shall terminate as to any of the Shares when (A) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (B) such security may be sold without registration in compliance with Rule 144 under the 1933 Act, or (C) a letter shall have been issued to the Holder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Holder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Holder or holder of Shares then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such Shares not bearing any restrictive legend.

(f) Company's Right of First Refusal. Subject to the foregoing, each time Holder proposes to sell any rights to purchase Shares hereunder or any of the Shares issuable upon exercise of such rights (the "Offered Shares"), Holder shall deliver a notice (a "Notice") to the Company stating, (A) its bona fide intention to sell such Offered Shares, (B) the number of such Offered Shares being offered, and (C) the price and terms, if any, upon which it proposes to offer such Offered Shares. Within twenty (20) days after receipt of the Notice (the "Notice Period"), the Company may elect by written notice to purchase or obtain, at the price and on the terms specified in the Notice, the number of Offered Shares as specified in the Notice, subject to applicable law with respect to issuer redemptions of securities. If the Company does not elect to purchase all of the Offered Shares, the Holder may, during the ninety (90) day period following the expiration of the Notice Period, offer the remaining unsubscribed portion of such Offered Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Holder does not enter into an agreement for the sale of the Offered Shares within such period, or if such agreement is not consummated within sixty (60) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Offered Shares shall not be offered unless first reoffered to the Company in accordance herewith. Notwithstanding anything herein to the contrary, this provision shall become null and void and of no further force or effect immediately upon consummation of the Pubco Transaction.

(g) Market Stand-Off.

(i) In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Company's initial public offering, Holder shall not sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or otherwise agree to engage in any of the foregoing transactions with respect to, any shares of Common Stock to be issued upon exercise hereof, without the prior written consent of the Company or its lead managing underwriter(s). Such restriction (the "Market Stand-Off") shall be in effect for such period of time from and after the effective date of the final prospectus for the offering as may be requested by the Company or such underwriter(s). In no event, however, shall such period exceed one hundred eighty (180) days, and the Market Stand-Off shall in all events terminate two (2) years after the effective date of the Company's initial public offering.

(ii) Holder shall be subject to the Market Stand-Off only if the officers and directors of the Company are also subject to similar restrictions.

(iii) Any new, substituted or additional securities which are by reason of any recapitalization or reorganization of the Company distributed with respect to the shares of Common Stock to be issued upon exercise hereof shall be immediately subject to the Market standoff, to the same extent the shares of Common Stock to be issued upon exercise hereof are at such time covered by such provisions.

(iv) In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the shares of Common Stock to be issued upon exercise hereof until the end of the applicable stand-off period.

(h) Any entity to whom Holder transfers any right to purchase the Shares pursuant to this Warrant or any of the Shares issuable upon the exercise of such right shall become a "Holder" for purposes of this Section 7.

8. **Reservation of Stock**. The Company covenants that during the term this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of this Warrant and, from time to time, will take all steps necessary to amend its Fifth Amended and Restated Certificate of Incorporation (the "Certificate") as the same may be amended from time to time to provide sufficient reserves of shares of Common Stock issuable upon exercise of the Warrant. The Company further covenants that all shares that may be issued upon the exercise of rights represented by this Warrant, upon exercise of the rights represented by this Warrant and payment of the Exercise Price, all as set forth herein, will be free from all taxes, liens, and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously or otherwise specified herein). The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

9. **Amendments**.

(a) This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the holder(s) of greater than 50% of unexercised Shares then issuable pursuant to all Warrants issued pursuant to the Purchase Agreement, provided that no part of Section 12 hereof (Right to Call) or Section 15(f) hereof (Placement Agent's Fees and Expenses) may be amended or waived without the written consent of the Placement Agent (as defined in the Purchase Agreement), in addition to the foregoing. With respect to a proposed modification, amendment or waiver of Section 12 only, if the Placement Agent does not object to such modification, amendment or waiver within 10 business days following such date when the Company has provided the Placement Agent with the proposed form of amendment, modification or waiver, the consent of the Placement Agent will be deemed to have been given. Any amendment, modification or waiver effected in accordance with this Section 9 shall be binding upon each future holder of the Warrant and the Company.

(b) No waivers of or exceptions to any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

10. **Adjustments**. The Exercise Price and the number of shares purchasable hereunder are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall, by reclassification of

securities or otherwise, change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 10.

(b) Dividend, Split, Subdivision or Combination of Shares. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall declare a dividend or make a distribution on the outstanding Common Stock payable in shares of its capital stock, or split, subdivide or combine the securities as to which purchase rights under this Warrant exist into a different number of securities of the same class, the Exercise Price for such securities shall be proportionately decreased in the case of a dividend, split or subdivision or proportionately increased in the case of a combination.

(c) Anti-Dilution.

i. Definitions. For the purposes of this Section 10(c), the following definitions shall apply:

1. "*Applicable Per Share Stated Value of the Series E Preferred Stock*" means $0.261 per share, subject to appropriate and proportionate adjustment for stock dividends payable in shares of , stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to the Series E Preferred Stock (as defined in the Purchase Agreement).

2. "*Common Stock Equivalent*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

3. "*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

4. "*Qualified Initial Public Offering*" means the closing of the Company's initial direct public offering or underwritten public offering on a firm

commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company (a) in which (i) the Company actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Company is listed on a national securities exchange.

ii. Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. For so long as there are any Warrants outstanding, if and whenever at any time and from time to time after the Warrant Issue Date, as applicable, the Company shall issue, or is, in accordance with Sections 10(c)(ii)(1) through 10(c)(ii)(7) of this Section 10, deemed to have issued, any shares of Common Stock for no consideration or a consideration per share less than the Exercise Price, as applicable, then, forthwith upon such issue or sale, the Warrants shall be subject to a proportional adjustment determined by multiplying such Warrant Exercise Price by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Company for the total number of such additional shares of Common Stock so issued or deemed to be issued would purchase at the Warrant Exercise Price, as applicable, in effect immediately prior to such issuance; and

N(2) = the number of such additional shares of Common Stock so issued or deemed to be issued.

For purposes of this Section 10(c)(ii), the following Sections 10(c)(ii)(1) to 10(c)(ii)(5) shall be applicable:

1. Consideration for Shares. For purposes of this Section 10(c)(ii), the consideration received by the Company for the issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

A. insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Company therefor, without deduction therefrom of any expenses incurred or any underwriting

commissions or concessions paid or allowed by the Company in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

B. insofar as such consideration consists of property other than cash, the value of such property received by the Company shall be deemed to be the fair value of such property at the time of such issuance as determined in good faith by the Board, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith;

C. insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock issued or deemed issued; and

D. in the event that Common Stock or Common Stock Equivalents shall be issued in connection with the issue of other securities of the Company, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board.

2. Issuance of Common Stock Equivalents. The issuance of any Common Stock Equivalents shall be deemed an issuance of the maximum number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents.

3. Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Company for any shares of Common Stock issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Company for the issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Company upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

4. Record Date. In case the Company shall establish a record date with respect to the holders of any class or series of the Company's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be

deemed to be the date of the issuance of the shares of Common Stock deemed to have been issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5. Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section 10(c)(ii) shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

A. the issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) to employees, consultants, officers or directors of the Company or any Affiliate or Subsidiary of the Company pursuant to a stock option plan or restricted stock plan or arrangement, which issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

B. the issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

C. the issuance of shares of Common Stock in a Qualified Initial Public Offering or pursuant to the Pubco Transaction;

D. the issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates (as defined in the Purchase Agreement) and are approved by a majority of the entire Board;

E. the issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and that are approved a majority of the entire Board;

F. the issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Company's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board; or

G. the issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Company or any of its Affiliates to investment bankers, placement agents

or advisors in connection with the issuance of Series E Preferred Stock and the Units (as defined in the Purchase Agreement).

(d) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 10, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request, at any time, of any such holder, furnish or cause to be furnished to such holder a like certificate setting forth: (i) such adjustments and readjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

11. **Registration Rights.** The shares of Common Stock issuable upon exercise of this Warrant shall have the registration rights set forth in the 2012 Unit Investor Rights Agreement attached as an exhibit to the Purchase Agreement.

12. **Right to Call**. Following the Pubco Transaction, Pubco may call this Warrant for redemption upon written notice to all Purchasers of Units (each as defined in the Purchase Agreement) at any time the closing price of the Common Stock exceeds $1.50 (as adjusted pursuant to Section 10) for 20 consecutive trading days, as reported by Bloomberg, provided at such time there is an effective registration statement covering the resale of the Shares. In the 60 business days following the date the redemption notice is deemed given in accordance with Section 15(e) hereof (the "Exercise Period"), investors may choose to exercise this Warrant or a portion of the Warrant by paying the then applicable Exercise Price per share for every Share exercised. Any Shares not exercised by 5:00 pm Eastern Time on the last day of the Exercise Period will be redeemed by the Company at $0.001 per share. Holder understands that the Placement Agent (as defined in the Purchase Agreement) shall be entitled to receive a warrant solicitation fee equal to 5% of the aggregate Exercise Price paid by Holder upon such exercise following a call for redemption by the Company. The Company shall direct the Holder to make such solicitation fee payment directly to the Placement Agent and the Holder shall comply with such direction.

13. **Reclassification; Reorganization; Merger.**

In case of any capital reorganization, other than in the cases referred to in Sections 10(a) and 10(b) hereof, or the consolidation or merger of the Company with or into another corporation, including without limitation, the Pubco Transaction (other than a merger or consolidation in which the Company is the continuing corporation and which does not result in any reclassification of the outstanding shares of Common Stock or the conversion of such outstanding shares of Common Stock into shares of other stock or other securities or property), or in the case of any sale, lease, or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety (such actions being hereinafter collectively referred to as "Reorganizations"), there shall thereafter be deliverable upon exercise of this Warrant (in lieu of the number of Shares theretofore deliverable) the number of shares of stock or other securities or property to which a holder of the respective number of

Shares which would otherwise have been deliverable upon the exercise of this Warrant would have been entitled upon such Reorganization if this Warrant had been exercised in full immediately prior to such Reorganization. In case of any Reorganization, appropriate adjustment, as determined in good faith by the Board of Directors of the Company, shall be made in the application of the provisions herein set forth with respect to the rights and interests of the Holder so that the provisions set forth herein shall thereafter be applicable, as nearly as possible, in relation to any shares or other property thereafter deliverable upon exercise of this Warrant. Any such adjustment shall be made by, and set forth in, a supplemental agreement between the Company, or any successor thereto (including, without limitation, Pubco) and the Holder, with respect to this Warrant, and shall for all purposes hereof conclusively be deemed to be an appropriate adjustment. The Company shall not effect any such Reorganization unless, upon or prior to the consummation thereof, the successor corporation, or, if the Company shall be the surviving corporation in any such Reorganization and is not the issuer of the shares of stock or other securities or property to be delivered to holders of shares of the Common Stock outstanding at the effective time thereof then such issuer (including, without limitation, Pubco), shall assume by written instrument the obligation to deliver to the Holder such shares of stock, securities, cash, or other property as such Holder shall be entitled to purchase in accordance with the foregoing provisions. In the event of sale, lease, or conveyance or other transfer of all or substantially all of the assets of the Company as part of a plan for liquidation of the Company, all rights to exercise this Warrant shall terminate thirty (30) days after the Company gives written notice to the Holder that such sale or conveyance or other transfer has been consummated.

The above provisions of this Section 13 shall similarly apply to successive reclassifications and changes of shares of Common Stock and to successive consolidations, mergers, sales, leases, or conveyances.

14. **Notice of Certain Events.**

In case at any time the Company shall propose:

(a) to pay any dividend or make any distribution on shares of Common Stock in shares of Common Stock or make any other distribution (other than regularly scheduled cash dividends which are not in a greater amount per share than the most recent such cash dividend) to all holders of Common Stock; or

(b) to issue any rights, warrants, or other securities to all holders of Common Stock entitling them to purchase any additional shares of Common Stock or any other rights, warrants, or other securities; or

(c) to effect any reclassification or change of outstanding shares of Common Stock or any consolidation, merger, sale, lease, or conveyance of property, as described in Section 13 (including, without limitation, the Pubco Transaction); or

(d) to effect any liquidation, dissolution, or winding-up of the Company; or

(e) to take any other action which would cause an adjustment to the Exercise Price;

then, and in any one or more of such cases, the Company shall give written notice thereof by registered mail, postage prepaid, to the Holder at the Holder's address as it shall appear in the Warrant Register, mailed at least fifteen (15) days prior to: (1) the date as of which the holders of record of shares of Common Stock to be entitled to receive any such dividend, distribution, rights, warrants, or other securities are to be determined, (2) the date on which any such reclassification, change of outstanding shares of Common Stock, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up is expected to become effective and the date as of which it is expected that holders of record of shares of Common Stock shall be entitled to exchange their shares for securities or other property, if any, deliverable upon such reclassification, change of outstanding shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up, or (3) the date of such action which would require an adjustment to the Exercise Price.

15 Miscellaneous.

(a) Additional Undertaking. The Holder hereby agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on either the Holder or the shares of Common Stock issued upon exercise hereof pursuant to the provisions of this Warrant.

(b) Governing Law; Venue. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware without resort to that State's conflict-of-laws rules. Venue for any legal action hereunder shall be in the state or federal courts located in the Borough of Manhattan, New York, New York.

(c) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

(d) Successors and Assigns. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Holder, the Holder's permitted assigns and the legal representatives, heirs and legatees of the Holder's estate, whether or not any such person shall have become a party to this Warrant and have agreed in writing to join herein and be bound by the terms hereof.

(e) Notices. All notices, requests, demands and other communications given or made in accordance with the provisions of this Warrant shall be addressed (i) if to Holder, at such Holder's address, fax number or email address, as furnished to the Company on the signature page to the Purchase Agreement or as otherwise furnished to the Company by the Holder in writing, or (ii) if to the Company, to the attention of the President at such address, fax number or email address furnished to the Holder on the signature page to the Purchase

Agreement or as otherwise furnished by the Company in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

(f) Placement Agent's Fee and Expenses. Holder understands that, upon any exercise of this Warrant for cash within six months following the final Closing under the Purchase Agreement, the Placement Agent shall be entitled to receive a commission equal to 10% and a non-accountable expense allowance equal to 2% of the aggregate Exercise Price paid by Holder upon such exercise. The Company shall direct the Holder to make such commission and expense payment directly to the Placement Agent and the Holder shall comply with such direction.

[Signatures appear on the following page]

IN WITNESS WHEREOF, **Actinium Pharmaceuticals, Inc.** has caused this Warrant to be executed by its officer thereunto duly authorized.

Dated as of _____, **2012**.

ACTINIUM PHARMACEUTICALS, INC.

By: _____
Jack V. Talley
President and Chief Executive Officer

HOLDER

The Holder has executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed this Warrant in all respects and is bound to purchase the terms thereof as set forth in the Subscription Agreement.

NOTICE OF EXERCISE

To: **Actinium Pharmaceuticals, Inc.**

(1) The undersigned hereby elects to purchase _____ (_____) shares of Common Stock of **Actinium Pharmaceuticals, Inc.**, pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price for such shares in full.

(2) Payment shall take the form of (check applicable box):

[ ] lawful money of the United States; or

[ ] the cancellation of such number of warrant Shares as is necessary, in accordance with the formula set forth in subsection 3(c), to exercise this Warrant with respect to the number of warrant Shares for which the Warrant is being exercised pursuant to the cashless exercise procedure set forth in subsection 3(c).

(3) In exercising this Warrant, the undersigned hereby confirms and acknowledges that the shares of Common Stock have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), and are restricted securities under the 1933 Act and that the undersigned will not offer, sell, or otherwise dispose of any such shares of Common Stock except under circumstances that will not result in a violation of the 1933 Act or any state securities laws.

(4) Please issue a certificate or certificates representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name _____

(5) Please issue a new Warrant for the unexercised portion of the attached Warrant in the name of the undersigned or in such other name as is specified below:

Name _____

Name _____

Date: _____ Signature: _____

Exhibit 4.3

LOCK-UP LETTER AGREEMENT

Laidlaw & Company (UK) Ltd.
90 Park Avenue – 31st Floor
New York, NY 10016

The investors set forth on the signature
pages of the Unit Purchase Agreement,
by and among Actinium Pharmaceuticals, Inc.
and each of the purchasers identified on Exhibit A
attached thereto

Dear Sirs:

The undersigned understands that Actinium Pharmaceuticals, Inc. ("API") intends to enter into a Unit Purchase Agreement, by and among API and each of the purchasers identified on Exhibit A attached thereto (the "Agreement") pursuant to which API intends to issue in units of API's securities (the "Units"), with each Unit having a purchase price of $100,000 and consisting of one hundred eighty-one thousand eight hundred eighteen (181,818) shares of common stock of API ("API Common Stock") and two Investor Warrants as follows: (i) an "A" Warrant to purchase one hundred eighty-one thousand eight hundred eighteen (181,818) shares of API Common Stock, exercisable at a price of $0.55 per share for a period of one hundred and twenty (120) days from the date of the final closing of the offering, and (ii) a "B" Warrant to purchase ninety thousand nine hundred nine (90,909) shares of API Common Stock, exercisable at a price of $0.825 per share for a period of five (5) years from the date of the final closing.

The undersigned also understands that API intends to enter into a Share Exchange Agreement with Cactus Ventures, Inc., a Nevada corporation ("Cactus"), pursuant to which Cactus will acquire 100% of the issued and outstanding equity securities of API, in exchange for the issuance of shares of common stock, par value $0.01 per share, of Cactus (the " Cactus Common Stock"), which are to be issued to the shareholders of API, constituting approximately 99% of the issued and outstanding Cactus Common Stock after such issuance (the "Share Exchange"). As a result of the Share Exchange, API will become the wholly owned subsidiary of Cactus and the former shareholders of API will became the controlling shareholders of Cactus.

In consideration of the execution of the Agreement by the purchasers and consummation of the Share Exchange, and for other good and valuable consideration, the undersigned hereby irrevocably agrees that the undersigned will not, directly or indirectly, that following the consummation of the Share exchange, sell or otherwise transfer any shares of Cactus Common Stock or other securities of Cactus owned by such person until (i) the date that is the earlier of twelve (12) months from the closing date of the Share Exchange; or (ii) six (6) months following the effective date of the Registration Statement.

In furtherance of the foregoing, Cactus and its transfer agent are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Letter Agreement.

It is understood that, if API notifies the undersigned that it does not intend to proceed with the Share Exchange or if the Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to the closing of the Share Exchange, then the undersigned will be released from the undersigned's obligations under this Lock-Up Letter Agreement.

The undersigned understands that API and the investors will proceed with the Agreement and Share Exchange in reliance on this Lock-Up Letter Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Letter Agreement and that, upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

Very truly yours,

By:_____
Name:
Title:

Dated:_____

REGISTRATION RIGHTS AGREEMENT

among

ACTINIUM PHARMACEUTICALS, INC.,

GENERAL ATLANTIC INVESTMENTS LIMITED,

N.V. ORGANON,

ISOTOPIA B.V.

DR. MAURITS W. GEERLINGS, SR.,

DR. MAURITS W. GEERLINGS, JR.

and

KENNETH R. GIVENS

Dated: June __, 2000

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REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT, dated [ ], 2000 (this "Agreement"), among ACTINIUM PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), GENERAL ATLANTIC INVESTMENTS LIMITED, a Bermuda corporation ("General Atlantic"), N.V. ORGANON, a Netherlands corporation, ISOTOPIA B.V., a private limited company established under Netherlands law ("Isotopia"), DR. MAURITS W. GEERLINGS, SR., DR. MAURITS W. GEERLINGS, JR. and KENNETH R. GIVENS.

WHEREAS, pursuant to the Stock Purchase Agreement, dated the date hereof (the "Stock Purchase Agreement"), among the Company, Actinium Pharmaceuticals, Inc. and General Atlantic, the Company has agreed to issue and sell to General Atlantic, (a) an aggregate of up to 1,000,000 shares of Series A Convertible Participating Preferred Stock, par value $.01 per share, of the Company (the "Preferred Stock");

WHEREAS, concurrently herewith, the Company, Actinium Pharmaceuticals, Inc., General Atlantic and the Major Stockholders (as hereinafter defined) are entering into the Stockholders Agreement (as hereinafter defined), pursuant to which the parties thereto have agreed to, among other things, certain first offer, drag-along and tag-along rights, preemptive rights and certain corporate governance rights and obligations; and

WHEREAS, in order to induce General Atlantic to purchase its shares of Preferred Stock and to induce the parties hereto to enter into the Stockholders Agreement, the Company has agreed to grant registration rights with respect to the Registrable Securities (as hereinafter defined) as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. As used in this Agreement the following terms have the meanings indicated:

"Affiliate" means any Person who is an "affiliate" as defined in Rule 12b-2 of the General Rules and Regulations under the Exchange Act.

"Approved Underwriter" has the meaning set forth in Section 3(f) of this Agreement.

"Business Day" means any day other than a Saturday, Sunday or other day on which commercial banks in the State of New York are authorized or required by law or executive order to close.

"Closing Price" means, with respect to the Registrable Securities, as of the date of determination, (a) if the Registrable Securities are listed on a national securities exchange, the closing price per share of a Registrable Security on such date published in The Wall Street Journal (National Edition) or, if no such closing price on such date is published in The Wall Street Journal (National Edition), the average of the closing bid and asked prices on such date, as officially reported on the principal national securities exchange on which the Registrable Securities are then listed or admitted to trading; or (b) if the Registrable Securities are not then listed or admitted to trading on any national securities exchange but are designated as national market system securities by the NASD, the last trading price per share of a

Registrable Security on such date; or (c) if there shall have been no trading on such date or if the Registrable Securities are not designated as national market system securities by the NASD, the average of the reported closing bid and asked prices of the Registrable Securities on such date as shown by The Nasdaq Stock Market, Inc. (or its successor) and reported by any member firm of The New York Stock Exchange, Inc. selected by the Company; or (d) if none of (a), (b) or (c) is applicable, a market price per share determined in good faith by the Company's Board of Directors or, if such determination is not satisfactory to the Designated Holder for whom such determination is being made, by a nationally recognized investment banking firm selected by the Company and such Designated Holder, the expenses for which shall be borne equally by the Company and such Designated Holder. If trading is conducted on a continuous basis on any exchange, then the closing price shall be at 4:00 P.M. New York City time.

"Commission" means the Securities and Exchange Commission or any similar agency then having jurisdiction to enforce the Securities Act.

"Common Stock" means the Common Stock, par value $.01 per share, of the Company or any other capital stock of the Company into which such stock is reclassified or reconstituted and any other common stock of the Company.

"Company" has the meaning set forth in the preamble to this Agreement.

"Company Underwriter" has the meaning set forth in Section 4(a) of this Agreement.

"Demand Registration" has the meaning set forth in Section 3(a) of this Agreement.

"Designated Holder" means each of the General Atlantic Stockholders, the Major Stockholders and any transferee of any of them to whom Registrable Securities have been transferred in accordance with Section 10(f) of this Agreement, other than a transferee to whom Registrable Securities have been transferred pursuant to a Registration Statement under the Securities Act or Rule 144 or Regulation S under the Securities Act (or any successor rule thereto).

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

"General Atlantic Stockholders" means General Atlantic and any Permitted Transferee thereof to whom Registrable Securities are transferred in accordance with Section 2.2 of the Stockholders Agreement (so long as such agreement is in effect) and Section 10(f) of this Agreement.

"Holders' Counsel" has the meaning set forth in Section 7(a)(i) of this Agreement.

"Incidental Registration" has the meaning set forth in Section 4(a) of this Agreement.

"Indemnified Party" has the meaning set forth in Section 8(c) of this Agreement.

"Indemnifying Party" has the meaning set forth in Section 8(c) of this Agreement.

"Initial Public Offering" means the initial public offering of the shares of Common Stock of the Company pursuant to an effective Registration Statement filed under the Securities Act.

"Initiating Holders" has the meaning set forth in Section 3(a) of this Agreement.

"Inspector" has the meaning set forth in Section 7(a)(vii) of this Agreement.

"IPO Effectiveness Date" means the date upon which the Company closes its Initial Public Offering.

"Liability" has the meaning set forth in Section 8(a) of this Agreement.

"Major Stockholders" means N.V. Organon, a Netherlands corporation, Isotopia, Dr. Maurits W. Geerlings, Sr., Dr. Maurits W. Geerlings, Jr., Kenneth R. Givens and any Permitted Transferee thereof to whom Registrable Securities are transferred in accordance with Section 2.2 of the Stockholders Agreement (so long as such agreement is in effect) and Section 10(f) of this Agreement.

"Market Price" means, on any date of determination, the average of the daily Closing Price of the Registrable Securities for the immediately preceding thirty (30) days on which the national securities exchanges are open for trading.

"NASD" means the National Association of Securities Dealers, Inc.

"Person" means any individual, firm, corporation, partnership, limited liability company, trust, incorporated or unincorporated association, joint venture, joint stock company, limited liability company, government (or an agency or political subdivision thereof) or other entity of any kind, and shall include any successor (by merger or otherwise) of such entity.

"Preferred Stock" has the meaning set forth in the recitals to this Agreement.

"Records" has the meaning set forth in Section 7(a)(vii) of this Agreement.

"Registrable Securities" means each of the following: (a) any and all shares of Common Stock owned by the Designated Holders or issued or issuable upon conversion of shares of Preferred Stock and any shares of Common Stock issued or issuable upon conversion of any shares of preferred stock acquired by any of the Designated Holders after the date hereof, (b) any other shares of Common Stock acquired or owned by any of the Designated Holders prior to the IPO Effectiveness Date, or acquired or owned by any of the Designated Holders after the IPO Effectiveness Date if such Designated Holder is an Affiliate of the Company and (c) any shares of Common Stock issued or issuable to any of the Designated Holders with respect to the Registrable Securities by way of stock dividend or stock split or in connection with a combination of shares, recapitalization, merger, consolidation or other reorganization or otherwise and any shares of Common Stock or voting common stock issuable upon conversion, exercise or exchange thereof.

"Registration Expenses" has the meaning set forth in Section 7(d) of this Agreement.

"Registration Statement" means a Registration Statement filed pursuant to the Securities Act.

"S-3 Initiating Holders" has the meaning set forth in Section 5(a) of this Agreement.

"S-3 Registration" has the meaning set forth in Section 5(a) of this Agreement.

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

"Stock Purchase Agreement" has the meaning set forth in the recitals to this Agreement.

"Stockholders Agreement" means the Stockholders Agreement, dated the date hereof, among the Company, General Atlantic, the Major Stockholders and the stockholders listed on Schedule A thereto.

"Valid Business Reason" has the meaning set forth in Section 3(a) of this Agreement.

2. General; Securities Subject to this Agreement.

(a) Grant of Rights. The Company hereby grants registration rights to the Designated Holders upon the terms and conditions set forth in this Agreement.

(b) Registrable Securities. For the purposes of this Agreement, Registrable Securities will cease to be Registrable Securities, when (i) a Registration Statement covering such Registrable Securities has been declared effective under the Securities Act by the Commission and such Registrable Securities have been disposed of pursuant to such effective Registration Statement, (ii) (x) the entire amount of the Registrable Securities may be sold in a single sale, in the opinion of counsel satisfactory to the Company and the Designated Holder, each in their reasonable judgment, without any limitation as to volume pursuant to Rule 144 (or any successor provision then in effect) under the Securities Act and (y) the Designated Holder owning such Registrable Securities owns less than one percent (1%) of the outstanding shares of Common Stock on a fully diluted basis, or (iii) the Registrable Securities are proposed to be sold or distributed by a Person not entitled to the registration rights granted by this Agreement.

(c) Holders of Registrable Securities. A Person is deemed to be a holder of Registrable Securities whenever such Person owns of record Registrable Securities, or holds an option to purchase, or a security convertible into or exercisable or exchangeable for, Registrable Securities whether or not such acquisition or conversion has actually been effected. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company may act upon the basis of the instructions, notice or election received from the registered owner of such Registrable Securities. Registrable Securities issuable upon exercise of an option or upon conversion of another security shall be deemed outstanding for the purposes of this Agreement.

3. Demand Registration.

(a) Request for Demand Registration. At any time commencing after the end of the applicable lock-up period following the IPO Effectiveness Date, the holders of 25% of the shares of common stock held by General Atlantic and the Major Stockholders, collectively (the "Initiating Holders"), may make a written request to the Company to register, and the Company shall register, under the Securities Act (other than pursuant to a Registration Statement on Form S-4 or S-8 or any successor thereto) (a "Demand Registration"), the number of Registrable Securities stated in such request; provided, however, that the Company shall not be obligated to effect more than one such Demand Registration for the Initiating Holders. For purposes of the preceding sentence, two or more Registration Statements filed in response to one demand shall be counted as one Demand Registration. If the Board of Directors of the Company, in its good faith judgment, determines that any registration of Registrable Securities should not be made or continued because it would materially interfere with any material financing, acquisition, corporate reorganization or merger or other material transaction involving the Company (a "Valid Business Reason"), the Company may (x) postpone filing a registration statement relating to a Demand Registration until such Valid Business Reason no longer exists, but in no event for more than ninety (90) days, and (y) in case a registration statement has been filed relating to a Demand Registration, if the Valid Business Reason has not resulted from actions taken by the Company, the Company, upon the approval of a majority of the Company's Board of Directors, such majority to include the General Atlantic Director (as defined in the Stockholders Agreement), may cause such registration statement to be withdrawn and its effectiveness terminated or may postpone amending or supplementing such registration statement. The Company shall give written notice of its determination to postpone or withdraw a

registration statement and of the fact that the Valid Business Reason for such postponement or withdrawal no longer exists, in each case, promptly after the occurrence thereof. Notwithstanding anything to the contrary contained herein, the Company may not postpone or withdraw a filing under this Section 3(a) more than once in any twelve (12) month period. Each request for a Demand Registration by the Initiating Holders shall state the amount of the Registrable Securities proposed to be sold and the intended method of disposition thereof.

(b) Incidental or "Piggy-Back" Rights with Respect to a Demand Registration. Each of the Designated Holders (other than Initiating Holders which have requested a registration under Section 3(a)) may offer its or his Registrable Securities under any Demand Registration pursuant to this Section 3(b). Within five (5) days after the receipt of a request for a Demand Registration from an Initiating Holder, the Company shall (i) give written notice thereof to all of the Designated Holders (other than Initiating Holders which have requested a registration under Section 3(a)) and (ii) subject to Section 3(e), include in such registration all of the Registrable Securities held by such Designated Holders from whom the Company has received a written request for inclusion therein within ten (10) days of the receipt by such Designated Holders of such written notice referred to in clause (i) above. Each such request by such Designated Holders shall specify the number of Registrable Securities proposed to be registered. The failure of any Designated Holder to respond within such 10-day period referred to in clause (ii) above shall be deemed to be a waiver of such Designated Holder's rights under this Section 3 with respect to such Demand Registration. Any Designated Holder may waive its rights under this Section 3 prior to the expiration of such 10-day period by giving written notice to the Company, with a copy to the Initiating Holders. If a Designated Holder sends the Company a written request for inclusion of part or all of such Designated Holder's

Registrable Securities in a registration, such Designated Holder shall not be entitled to withdraw or revoke such request without the prior written consent of the Company in its sole discretion unless, as a result of facts or circumstances arising after the date on which such request was made relating to the Company or to market conditions, such Designated Holder reasonably determines that participation in such registration would have a material adverse effect on such Designated Holder.

(c) Effective Demand Registration. The Company shall use its reasonable best efforts to cause any such Demand Registration to become and remain effective not later than sixty (60) days after it receives a request under Section 3(a) hereof. A registration shall not constitute a Demand Registration until it has become effective and remains continuously effective for the lesser of (i) the period during which all Registrable Securities registered in the Demand Registration are sold and (ii) 120 days; provided, however, that a registration shall not constitute a Demand Registration if (x) after such Demand Registration has become effective, such registration or the related offer, sale or distribution of Registrable Securities thereunder is interfered with by any stop order, injunction or other order or requirement of the Commission or other governmental agency or court for any reason not attributable to the Initiating Holders and such interference is not thereafter eliminated or (y) the conditions specified in the underwriting agreement, if any, entered into in connection with such Demand Registration are not satisfied or waived, other than by reason of a failure by the Initiating Holder.

(d) Expenses. The Company shall pay all Registration Expenses in connection with a Demand Registration, whether or not such Demand Registration becomes effective.

(e) Underwriting Procedures. If the Company or the Initiating Holders holding a majority of the Registrable Securities held by all of the Initiating Holders so elect, the Company shall use its reasonable best efforts to cause such Demand Registration to be in the form of a firm commitment underwritten offering and the managing underwriter or underwriters selected for such offering shall be the Approved Underwriter selected in accordance with Section 3(f). In connection with any Demand Registration under this Section 3 involving an underwritten offering, none of the Registrable Securities held by any Designated Holder making a request for inclusion of such Registrable Securities pursuant to Section 3(b) hereof shall be included in such underwritten offering unless such Designated Holder accepts the terms of the offering as agreed upon by the Company, the Initiating Holders and the Approved Underwriter, and then only in such quantity as will not, in the opinion of the Approved Underwriter, jeopardize the success of such offering by the Initiating Holders. If the Approved Underwriter advises the Company that the aggregate amount of such Registrable Securities requested to be included in such offering is sufficiently large to have a material adverse effect on the success of such offering, then the Company shall include in such registration only the aggregate amount of Registrable Securities that the Approved Underwriter believes may be sold without any such material adverse effect and shall reduce the amount of Registrable Securities to be included in such registration, first as to the Company, second as to the Designated Holders (who are not Initiating Holders and who requested to participate in such registration pursuant to Section 3(b) hereof) as a group, if any, and third as to the Initiating Holders as a group, pro rata within each group based on the number of Registrable Securities owned by each such Designated Holder or Initiating Holder, as the case may be.

(f) Selection of Underwriters. If any Demand Registration or S-3 Registration, as the case may be, of Registrable Securities is in the form of an underwritten offering, the Company shall select and obtain an investment banking firm of national reputation to act as the managing underwriter of the offering (the "Approved Underwriter"); provided, however, that the Approved Underwriter shall, in any case, also be approved by the Initiating Holders or S-3 Initiating Holders, as the case may be, such approval not to be unreasonably withheld.

4. Incidental or "Piggy-Back" Registration.

(a) Request for Incidental Registration. At any time after the IPO Effectiveness Date, if the Company proposes to file a Registration Statement under the Securities Act with respect to an offering by the Company for its own account (other than a Registration Statement on Form S-4 or S-8 or any successor thereto) or for the account of any stockholder of the Company other than the Designated Holders, then the Company shall give written notice of such proposed filing to each of the Designated Holders at least twenty (20) days before the anticipated filing date, and such notice shall describe the proposed registration and distribution and offer such Designated Holders the opportunity to register the number of Registrable Securities as each such Designated Holder may request (an "Incidental Registration"). The Company shall use its reasonable best efforts (within twenty (20) days of the notice provided for in the preceding sentence) to cause the managing underwriter or underwriters in the case of a proposed underwritten offering (the "Company Underwriter") to permit each of the Designated Holders who have requested in writing to participate in the Incidental Registration to include its or his Registrable Securities in such offering on the same terms and conditions as the securities of the Company or the account of such other stockholder, as the case may be, included therein.

In connection with any Incidental Registration under this Section 4(a) involving an underwritten offering, the Company shall not be required to include any Registrable Securities in such underwritten offering unless the Designated Holders thereof accept the terms of the underwritten offering as agreed upon between the Company, such other stockholders, if any, and the Company Underwriter, and then only in such quantity as the Company Underwriter believes will not jeopardize the success of the offering by the Company. If the Company Underwriter determines that the registration of all or part of the Registrable Securities which the Designated Holders have requested to be included would materially adversely affect the success of such offering, then the Company shall be required to include in such Incidental Registration, to the extent of the amount that the Company Underwriter believes may be sold without causing such adverse effect, first, all of the securities to be offered for the account of the Company; second, the Registrable Securities to be offered for the account of the Designated Holders pursuant to this Section 4, pro rata based on the number of Registrable Securities owned by each such Designated Holder; and third, any other securities requested to be included in such offering.

(b) Expenses. The Company shall bear all Registration Expenses in connection with any Incidental Registration pursuant to this Section 4, whether or not such Incidental Registration becomes effective.

5. Form S-3 Registration.

(a) Request for a Form S-3 Registration. Upon the Company becoming eligible for use of Form S-3 (or any successor form thereto) under the Securities Act in connection with a public offering of its securities, in the event that the Company shall receive from the holders of 25% of the shares of common stock held by General Atlantic and the Major

Stockholders, collectively (the "S-3 Initiating Holders"), a written request that the Company register, under the Securities Act on Form S-3 (or any successor form then in effect) (an "S-3 Registration"), all or a portion of the Registrable Securities owned by such S-3 Initiating Holders, the Company shall give written notice of such request to all of the Designated Holders (other than S-3 Initiating Holders which have requested an S-3 Registration under this Section 5(a)) at least ten (10) days before the anticipated filing date of such Form S-3, and such notice shall describe the proposed registration and offer such Designated Holders the opportunity to register the number of Registrable Securities as each such Designated Holder may request in writing to the Company, given within ten (10) days after their receipt from the Company of the written notice of such registration. With respect to each S-3 Registration, the Company shall, subject to Section 5(b), (i) include in such offering the Registrable Securities of the S-3 Initiating Holders and (ii) use its reasonable best efforts to (x) cause such registration pursuant to this Section 5(a) to become and remain effective as soon as practicable, but in any event not later than forty-five (45) days after it receives a request therefor and (y) include in such offering the Registrable Securities of the Designated Holders (other than S-3 Initiating Holders which have requested an S-3 Registration under this Section 5(a)) who have requested in writing to participate in such registration on the same terms and conditions as the Registrable Securities of the S-3 Initiating Holders included therein.

(b) Form S-3 Underwriting Procedures. If the S-3 Initiating Holders holding a majority of the Registrable Securities held by all of the S-3 Initiating Holders so elect, the Company shall use its reasonable best efforts to cause such S-3 Registration pursuant to this Section 5 to be in the form of a firm commitment underwritten offering and the managing underwriter or underwriters selected for such offering shall be the Approved Underwriter

selected in accordance with Section 3(f). In connection with any S-3 Registration under Section 5(a) involving an underwritten offering, the Company shall not be required to include any Registrable Securities in such underwritten offering unless the Designated Holders thereof accept the terms of the underwritten offering as agreed upon between the Company, the Approved Underwriter and the S-3 Initiating Holders, and then only in such quantity as such underwriter believes will not jeopardize the success of such offering by the S-3 Initiating Holders. If the Approved Underwriter believes that the registration of all or part of the Registrable Securities which the S-3 Initiating Holders and the other Designated Holders have requested to be included would materially adversely affect the success of such public offering, then the Company shall be required to include in the underwritten offering, to the extent of the amount that the Approved Underwriter believes may be sold without causing such adverse effect, first, all of the Registrable Securities to be offered for the account of the S-3 Initiating Holders, pro rata based on the number of Registrable Securities owned by such S-3 Initiating Holders; second, the Registrable Securities to be offered for the account of the other Designated Holders who requested inclusion of their Registrable Securities pursuant to Section 5(a), pro rata based on the number of Registrable Securities owned by such Designated Holders; and third, any other securities requested to be included in such offering.

(c) Limitations on Form S-3 Registrations. If the Board of Directors of the Company has a Valid Business Reason, the Company may (x) postpone filing a registration statement relating to a S-3 Registration until such Valid Business Reason no longer exists, but in no event for more than ninety (90) days, and (y) in case a registration statement has been filed relating to a S-3 Registration, if the Valid Business Reason has not resulted from actions taken by the Company, the Company, upon the approval of a majority of the Company's

Board of Directors, such majority to include the General Atlantic Director, may cause such registration statement to be withdrawn and its effectiveness terminated or may postpone amending or supplementing such registration statement. The Company shall give written notice of its determination to postpone or withdraw a registration statement and of the fact that the Valid Business Reason for such postponement or withdrawal no longer exists, in each case, promptly after the occurrence thereof. Notwithstanding anything to the contrary contained herein, the Company may not postpone or withdraw a filing due to a Valid Business Reason more than once in any twelve (12) month period. In addition, the Company shall not be required to effect any registration pursuant to Section 5(a), (i) within ninety (90) days after the effective date of any other Registration Statement of the Company, (ii) if the Company has already effected two (2) registrations on Form S-3 pursuant to Section 5(a), or (iii) if Form S-3 is not available for such offering by the S-3 Initiating Holders.

(d) Expenses. The Company shall bear all Registration Expenses in connection with any S-3 Registration pursuant to this Section 5, whether or not such S-3 Registration become effective.

(e) No Demand Registration. No registration requested by any Designated Holder pursuant to this Section 5 shall be deemed a Demand Registration pursuant to Section 3.

6. Holdback Agreements.

(a) Restrictions on Public Sale by Designated Holders. To the extent (i) requested (A) by the Company, the Initiating Holders or the S-3 Initiating Holders, as the case may be, in the case of a non-underwritten public offering and (B) by the Approved Underwriter

or the Company Underwriter, as the case may be, in the case of an underwritten public offering and (ii) all of the Company's officers, directors and holders in excess of one percent (1%) of its outstanding capital stock execute agreements identical to those referred to in this Section 6(a), each Designated Holder of Registrable Securities agrees (x) not to effect any public sale or distribution of any Registrable Securities or of any securities convertible into or exchangeable or exercisable for such Registrable Securities, including a sale pursuant to Rule 144 under the Securities Act, and (y) not to make any request for a Demand Registration or S-3 Registration under this Agreement, during the ninety (90) day period or such shorter period, if any, mutually agreed upon by such Designated Holder and the requesting party beginning on the effective date of such Registration Statement (except as part of such registration). No Designated Holder of Registrable Securities subject to this Section 6(a) shall be released from any obligation under any agreement, arrangement or understanding entered into pursuant to this Section 6(a) unless all other Designated Holders of Registrable Securities subject to the same obligation are also released.

(b) Restrictions on Public Sale by the Company. The Company agrees not to effect any public sale or distribution of any of its securities, or any securities convertible into or exchangeable or exercisable for such securities (except pursuant to registrations on Form S-4 or S-8 or any successor thereto), during the period beginning on the effective date of any Registration Statement in which the Designated Holders of Registrable Securities are participating and ending on the earlier of (i) the date on which all Registrable Securities registered on such Registration Statement are sold and (ii) 120 days after the effective date of such Registration Statement (except as part of such registration).

7. Registration Procedures.

(a) Obligations of the Company. Whenever registration of Registrable Securities has been requested pursuant to Section 3, Section 4 or Section 5 of this Agreement, the Company shall use its reasonable best efforts to effect the registration and sale of such Registrable Securities in accordance with the intended method of distribution thereof as quickly as practicable, and in connection with any such request, the Company shall, as expeditiously as possible:

(i) prepare and file with the Commission a Registration Statement on any form for which the Company then qualifies or which counsel for the Company shall deem appropriate and which form shall be available for the sale of such Registrable Securities in accordance with the intended method of distribution thereof, and cause such Registration Statement to become effective; provided, however, that (x) before filing a Registration Statement or prospectus or any amendments or supplements thereto, the Company shall provide counsel selected by the Designated Holders holding a majority of the Registrable Securities being registered in such registration ("Holders' Counsel") and any other Inspector with an adequate and appropriate opportunity to review and comment on such Registration Statement and each prospectus included therein (and each amendment or supplement thereto) to be filed with the Commission, subject to such documents being under the Company's control, and (y) the Company shall notify the Holders' Counsel and each seller of Registrable Securities of any stop order issued or threatened by the Commission and take all action required to prevent the entry of such stop order or to remove it if entered;

(ii) prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Registration Statement effective for the lesser of (x) 120 days and (y) such shorter period which will terminate when all Registrable Securities covered by such Registration Statement have been sold, and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such Registration Statement during such period in accordance with the intended methods of disposition by the sellers thereof set forth in such Registration Statement;

(iii) furnish to each seller of Registrable Securities, prior to filing a Registration Statement, at least one copy of such Registration Statement as is proposed to be filed, and thereafter such number of copies of such Registration Statement, each amendment and supplement thereto (in each case including all exhibits thereto), and the prospectus included in such Registration Statement (including each preliminary prospectus) and any prospectus filed under Rule 424 under the Securities Act as each such seller may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such seller;

(iv) register or qualify such Registrable Securities under such other securities or "blue sky" laws of such jurisdictions as any seller of Registrable Securities may request, and to continue such qualification in effect in such jurisdiction for as long as permissible pursuant to the laws of such jurisdiction, or for as long as any such seller requests or until all of such Registrable Securities are sold, whichever is shortest, and do any and all other acts and things which may be reasonably necessary or advisable to enable any such seller to consummate the disposition in such jurisdictions of the Registrable Securities owned by such seller; provided, however, that the Company shall not be required to (x) qualify generally to do

business in any jurisdiction where it would not otherwise be required to qualify but for this Section 7(a)(iv), (y) subject itself to taxation in any such jurisdiction or (z) consent to general service of process in any such jurisdiction;

(v) notify each seller of Registrable Securities at any time when a prospectus relating thereto is required to be delivered under the Securities Act, upon discovery that, or upon the happening of any event as a result of which, the prospectus included in such Registration Statement contains an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Company shall promptly prepare a supplement or amendment to such prospectus and furnish to each seller of Registrable Securities a reasonable number of copies of such supplement to or an amendment of such prospectus as may be necessary so that, after delivery to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;

(vi) enter into and perform customary agreements (including an underwriting agreement in customary form with the Approved Underwriter or Company Underwriter, if any, selected as provided in Section 3, Section 4 or Section 5, as the case may be) and take such other actions as are prudent and reasonably required in order to expedite or facilitate the disposition of such Registrable Securities, including causing its officers to participate in "road shows" and other information meetings organized by the Approved Underwriter or Company Underwriter;

(vii) make available at reasonable times for inspection by any seller of Registrable Securities, any managing underwriter participating in any disposition of such Registrable Securities pursuant to a Registration Statement, Holders' Counsel and any attorney, accountant or other agent retained by any such seller or any managing underwriter (each, an "Inspector" and collectively, the "Inspectors"), all financial and other records, pertinent corporate documents and properties of the Company and its subsidiaries (collectively, the "Records") as shall be reasonably necessary to enable them to exercise their due diligence responsibility, and cause the Company's and its subsidiaries' officers, directors and employees, and the independent public accountants of the Company, to supply all information reasonably requested by any such Inspector in connection with such Registration Statement. Records that the Company determines, in good faith, to be confidential and which it notifies the Inspectors are confidential shall not be disclosed by the Inspectors (and the Inspectors shall confirm their agreement in writing in advance to the Company if the Company shall so request) unless (x) the disclosure of such Records is necessary, in the Company's judgment, to avoid or correct a misstatement or omission in the Registration Statement, (y) the release of such Records is ordered pursuant to a subpoena or other order from a court of competent jurisdiction after exhaustion of all appeals therefrom or (z) the information in such Records was known to the Inspectors on a non-confidential basis prior to its disclosure by the Company or has been made generally available to the public. Each seller of Registrable Securities agrees that it shall, upon learning that disclosure of such Records is sought in a court of competent jurisdiction, give notice to the Company and allow the Company, at the Company's expense, to undertake appropriate action to prevent disclosure of the Records deemed confidential;

(viii) if such sale is pursuant to an underwritten offering, obtain a "cold comfort" letters dated the effective date of the registration statement and the date of the closing under the underwriting agreement from the Company's independent public accountants in customary form and covering such matters of the type customarily covered by "cold comfort" letters as Holders' Counsel or the managing underwriter reasonably requests;

(ix) furnish, at the request of any seller of Registrable Securities on the date such securities are delivered to the underwriters for sale pursuant to such registration or, if such securities are not being sold through underwriters, on the date the Registration Statement with respect to such securities becomes effective, an opinion, dated such date, of counsel representing the Company for the purposes of such registration, addressed to the underwriters, if any, and to the seller making such request, covering such legal matters with respect to the registration in respect of which such opinion is being given as the underwriters, if any, and such seller may reasonably request and are customarily included in such opinions;

(x) comply with all applicable rules and regulations of the Commission, and make available to its security holders, as soon as reasonably practicable but no later than fifteen (15) months after the effective date of the Registration Statement, an earnings statement covering a period of twelve (12) months beginning after the effective date of the Registration Statement, in a manner which satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(xi) cause all such Registrable Securities to be listed on each securities exchange on which similar securities issued by the Company are then listed, provided that the applicable listing requirements are satisfied;

(xii) keep Holders' Counsel advised in writing as to the initiation and progress of any registration under Section 3, Section 4 or Section 5 hereunder;

(xiii) cooperate with each seller of Registrable Securities and each underwriter participating in the disposition of such Registrable Securities and their respective counsel in connection with any filings required to be made with the NASD; and

(xiv) take all other steps reasonably necessary to effect the registration of the Registrable Securities contemplated hereby.

(b) Seller Information. The Company may require each seller of Registrable Securities as to which any registration is being effected to furnish, and such seller shall furnish, to the Company such information regarding the distribution of such securities as the Company may from time to time reasonably request in writing.

(c) Notice to Discontinue. Each Designated Holder of Registrable Securities agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 7(a)(v), such Designated Holder shall forthwith discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities until such Designated Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 7(a)(v) and, if so directed by the Company, such Designated Holder shall deliver to the Company (at the Company's expense) all copies, other than permanent file copies then in such Designated Holder's possession, of the prospectus covering such Registrable Securities which is current at the time of receipt of such notice. If the Company shall give any such notice, the Company shall extend the period during which such Registration Statement shall be maintained effective pursuant to this Agreement

(including, without limitation, the period referred to in Section 7(a)(ii)) by the number of days during the period from and including the date of the giving of such notice pursuant to Section 7(a)(v) to and including the date when sellers of such Registrable Securities under such Registration Statement shall have received the copies of the supplemented or amended prospectus contemplated by and meeting the requirements of Section 7(a)(v).

(d) Registration Expenses. The Company shall pay all expenses arising from or incident to its performance of, or compliance with, this Agreement, including, without limitation, (i) Commission, stock exchange and NASD registration and filing fees, (ii) all fees and expenses incurred in complying with securities or "blue sky" laws (including reasonable fees, charges and disbursements of counsel to any underwriter incurred in connection with "blue sky" qualifications of the Registrable Securities as may be set forth in any underwriting agreement), (iii) all printing, messenger and delivery expenses, (iv) the fees, charges and disbursements of counsel to the Company and of its independent public accountants and any other accounting fees, charges and expenses incurred by the Company (including, without limitation, any expenses arising from any "cold comfort" letters or any special audits incident to or required by any registration or qualification) and any legal fees, charges and expenses incurred by the Company and, in the case of a Demand Registration or an S-3 Registration, the Initiating Holders or the S-3 Initiating Holders, as the case may be, and (v) any liability insurance or other premiums for insurance obtained in connection with any Demand Registration or piggy-back registration thereon, Incidental Registration or S-3 Registration pursuant to the terms of this Agreement, regardless of whether such Registration Statement is declared effective. All of the expenses described in the preceding sentence of this Section 7(d) are referred to herein as "Registration Expenses." The Designated Holders of Registrable Securities sold pursuant to a

Registration Statement shall bear the expense of any broker's commission or underwriter's discount or commission relating to registration and sale of such Designated Holders' Registrable Securities and, subject to clause (iv) above, shall bear the fees and expenses of their own counsel.

8. Indemnification; Contribution.

(a) Indemnification by the Company. The Company agrees to indemnify and hold harmless each Designated Holder, its partners, directors, officers, affiliates and each Person who controls (within the meaning of Section 15 of the Securities Act) such Designated Holder from and against any and all losses, claims, damages, liabilities and expenses (including reasonable costs of investigation) (each, a "Liability" and collectively, "Liabilities"), arising out of or based upon any untrue, or allegedly untrue, statement of a material fact contained in any Registration Statement, prospectus or preliminary prospectus or notification or offering circular (as amended or supplemented if the Company shall have furnished any amendments or supplements thereto) or arising out of or based upon any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading under the circumstances such statements were made, except insofar as such Liability arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission contained in such Registration Statement, preliminary prospectus or final prospectus in reliance and in conformity with information concerning such Designated Holder furnished in writing to the Company by such Designated Holder expressly for use therein, including, without limitation, the information furnished to the Company pursuant to Section 8(b). The Company shall also provide customary indemnities to any underwriters of the Registrable Securities, their officers, directors and employees and each Person who controls such

underwriters (within the meaning of Section 15 of the Securities Act) to the same extent as provided above with respect to the indemnification of the Designated Holders of Registrable Securities.

(b) Indemnification by Designated Holders. In connection with any Registration Statement in which a Designated Holder is participating pursuant to Section 3, Section 4 or Section 5 hereof, each such Designated Holder shall promptly furnish to the Company in writing such information with respect to such Designated Holder as the Company may reasonably request or as may be required by law for use in connection with any such Registration Statement or prospectus and all information required to be disclosed in order to make the information previously furnished to the Company by such Designated Holder not materially misleading or necessary to cause such Registration Statement not to omit a material fact with respect to such Designated Holder necessary in order to make the statements therein not misleading. Each Designated Holder agrees to indemnify and hold harmless the Company, any underwriter retained by the Company and each Person who controls the Company or such underwriter (within the meaning of Section 15 of the Securities Act) to the same extent as the foregoing indemnity from the Company to the Designated Holders, but only if such statement or alleged statement or omission or alleged omission was made in reliance upon and in conformity with information with respect to such Designated Holder furnished in writing to the Company by such Designated Holder expressly for use in such registration statement or prospectus, including, without limitation, the information furnished to the Company pursuant to this Section 8(b); provided, however, that the total amount to be indemnified by such Designated Holder pursuant to this Section 8(b) shall be limited to the net proceeds received by such Designated Holder in the offering to which the Registration Statement or prospectus relates.

(c) Conduct of Indemnification Proceedings. Any Person entitled to indemnification hereunder (the "Indemnified Party") agrees to give prompt written notice to the indemnifying party (the "Indemnifying Party") after the receipt by the Indemnified Party of any written notice of the commencement of any action, suit, proceeding or investigation or threat thereof made in writing for which the Indemnified Party intends to claim indemnification or contribution pursuant to this Agreement; provided, however, that the failure so to notify the Indemnifying Party shall not relieve the Indemnifying Party of any Liability that it may have to the Indemnified Party hereunder (except to the extent that the Indemnifying Party is materially prejudiced or otherwise forfeits substantive rights or defenses by reason of such failure). If notice of commencement of any such action is given to the Indemnifying Party as above provided, the Indemnifying Party shall be entitled to participate in and, to the extent it may wish, jointly with any other Indemnifying Party similarly notified, to assume the defense of such action at its own expense, with counsel chosen by it and reasonably satisfactory to such Indemnified Party. The Indemnified Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be paid by the Indemnified Party unless (i) the Indemnifying Party agrees to pay the same, (ii) the Indemnifying Party fails to assume the defense of such action with counsel reasonably satisfactory to the Indemnified Party or (iii) the named parties to any such action (including any impleaded parties) include both the Indemnifying Party and the Indemnified Party and such parties have been advised by such counsel that either (x) representation of such Indemnified Party and the Indemnifying Party by the same counsel would be inappropriate under applicable standards of professional conduct or (y) there may be one or more legal defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying

Party. In any of such cases, the Indemnifying Party shall not have the right to assume the defense of such action on behalf of such Indemnified Party, it being understood, however, that the Indemnifying Party shall not be liable for the fees and expenses of more than one separate firm of attorneys (in addition to any local counsel) for all Indemnified Parties. No Indemnifying Party shall be liable for any settlement entered into without its written consent, which consent shall not be unreasonably withheld. No Indemnifying Party shall, without the consent of such Indemnified Party, effect any settlement of any pending or threatened proceeding in respect of which such Indemnified Party is a party and indemnity has been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability for claims that are the subject matter of such proceeding.

(d) Contribution. If the indemnification provided for in this Section 8 from the Indemnifying Party is unavailable to an Indemnified Party hereunder in respect of any Liabilities referred to herein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Liabilities in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions which resulted in such Liabilities, as well as any other relevant equitable considerations. The relative faults of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a party as a result of the Liabilities referred to above shall

be deemed to include, subject to the limitations set forth in Sections 8(a), 8(b) and 8(c), any legal or other fees, charges or expenses reasonably incurred by such party in connection with any investigation or proceeding; provided that the total amount to be contributed by such Designated Holder shall be limited to the net proceeds received by such Designated Holder in the offering.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 8(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

9. Rule 144. The Company covenants that from and after the IPO Effectiveness Date it shall (a) file any reports required to be filed by it under the Exchange Act and (b) take such further action as each Designated Holder of Registrable Securities may reasonably request (including providing any information necessary to comply with Rule 144 under the Securities Act), all to the extent required from time to time to enable such Designated Holder to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by (i) Rule 144 under the Securities Act, as such rule may be amended from time to time, or Regulation S under the Securities Act or (ii) any similar rules or regulations hereafter adopted by the Commission. The Company shall, upon the request of any Designated Holder of Registrable Securities, deliver to such Designated Holder a written statement as to whether it has complied with such requirements.

10. Miscellaneous.

(a) Recapitalizations, Exchanges, etc. The provisions of this Agreement shall apply to the full extent set forth herein with respect to (i) the shares of Common Stock, (ii) any and all shares of voting common stock of the Company into which the shares of Common Stock are converted, exchanged or substituted in any recapitalization or other capital reorganization by the Company and (iii) any and all equity securities of the Company or any successor or assign of the Company (whether by merger, consolidation, sale of assets or otherwise) which may be issued in respect of, in conversion of, in exchange for or in substitution of, the shares of Common Stock and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof. The Company shall cause any successor or assign (whether by merger, consolidation, sale of assets or otherwise) to enter into a new registration rights agreement with the Designated Holders on terms substantially the same as this Agreement as a condition of any such transaction.

(b) No Inconsistent Agreements. The Company represents and warrants that it has not granted to any Person the right to request or require the Company to register any securities issued by the Company, other than the rights granted to the Designated Holders herein. The Company shall not enter into any agreement with respect to its securities that is inconsistent with the rights granted to the Designated Holders in this Agreement or grant any additional registration rights to any Person or with respect to any securities which are not Registrable Securities which are prior in right to or inconsistent with the rights granted in this Agreement.

(c) Remedies and Termination. The Designated Holders, in addition to being entitled to exercise all rights granted by law, including recovery of damages, shall be entitled to specific performance of their rights under this Agreement. The Company agrees that

monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Agreement and hereby agrees to waive in any action for specific performance the defense that a remedy at law would be adequate. This Agreement may be terminated by any of the Major Stockholders by giving written notice to the Company and General Atlantic in the event General Atlantic has failed to purchase additional shares of Preferred Stock when required to do so pursuant to Section 2.5(b) of the Stock Purchase Agreement and such breach remains uncured after General Atlantic has been given written notice and five (5) business days to cure such breach.

(d) Amendments and Waivers. Except as otherwise provided herein, the provisions of this Agreement may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given unless consented to in writing by (i) the Company, (ii) the General Atlantic Stockholders holding Registrable Securities representing (after giving effect to any adjustments) at least a majority of the aggregate number of Registrable Securities owned by all of the General Atlantic Stockholders and (iii) the Major Stockholders holding Registrable Securities representing (after giving effect to any adjustments) at least a majority of the aggregate number of Registrable Securities owned by all of the Major Stockholders. Any such written consent shall be binding upon the Company and all of the Designated Holders.

(e) Notices. All notices, demands and other communications provided for or permitted hereunder shall be made in writing and shall be made by registered or certified first-class mail, return receipt requested, telecopier, courier service or personal delivery:

(i) if to the Company:

Actinium Pharmaceuticals, Inc.
Sterling House
16 Wesley Street
Hamilton
Bermuda MM MX
Telecopy: (414) 295-4897
Attention: Sarah Cooke

with a copy to:

Akin, Gump, Strauss, Hauer & Feld, L.L.P.
Robert E. Strauss Building
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036
Telecopy: (202) 887-4288
Attention: Robert G. Pinco

(ii) if to General Atlantic:

c/o General Atlantic Group Limited
P.O. Box HM 2265
Hamilton, Bermuda
Telecopy: (441) 295-4314
Attention: Craig P. Mayor

with a copy to:

Paul, Weiss, Rifkind, Wharton & Garrison
1285 Avenue of the Americas
New York, NY 10019-6064
Telecopy: (212) 757-3990
Attention: Marilyn Sobel, Esq.

(iii) if to a Major Stockholder:

N.V. Organon
Kloosterstraat 6
5349 AB Oss
The Netherlands
Telecopy: 31 412 664 6923
Attention: K. Luijben

(iv) if to any other Designated Holder, at its address as it appears on the record books of the Company.

All such notices, demands and other communications shall be deemed to have been duly given when delivered by hand, if personally delivered; when delivered by courier, if delivered by commercial courier service; five (5) Business Days after being deposited in the mail, postage prepaid, if mailed; and when receipt is mechanically acknowledged, if telecopied.

(f) Successors and Assigns; Third Party Beneficiaries. This Agreement shall inure to the benefit of and be binding upon the heirs, legatees, legal representatives, successors and permitted assigns of each of the parties hereto as hereinafter provided. The Demand Registration rights and the S-3 Registration rights and related rights of the General Atlantic Stockholders contained in Sections 3 and 5 hereof, shall be (i) with respect to any Registrable Security that is transferred to an Affiliate of a General Atlantic Stockholder or Major Stockholder, automatically transferred to such Affiliate and (ii) with respect to any Registrable Security that is transferred in all cases to a non-Affiliate, transferred only with the consent of the Company which consent shall not be unreasonably withheld. The incidental or "piggy-back" registration rights of the Designated Holders contained in Sections 3(b), 4 and 5 hereof and the other rights of each of the Designated Holders with respect thereto shall be, with respect to any Registrable Security, automatically transferred to any Person who is the transferee

of such Registrable Security, but only if transferred in compliance with the Stockholders Agreement. All of the obligations of the Company hereunder shall survive any such transfer. Except as provided in Section 8, no Person other than the parties hereto and their heirs, legatees, legal representatives, successors and permitted assigns is intended to be a beneficiary of any of the rights granted hereunder.

(g) Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

(h) Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(i) **GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW OF ANY JURISDICTION.**

(j) Severability. If any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions hereof shall not be in any way impaired, it being intended that all of the rights and privileges of the Designated Holders shall be enforceable to the fullest extent permitted by law.

(k) Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and in the Stock Purchase Agreement and Stockholders Agreement. This Agreement supersedes all prior agreements and understandings among the parties with respect to such subject matter.

(l) Further Assurances. Each of the parties shall execute such documents and perform such further acts as may be reasonably required or necessary to carry out or to perform the provisions of this Agreement.

(m) Other Agreements. Nothing contained in this Agreement shall be deemed to be a waiver of, or release from, any obligations any party hereto may have under, or any restrictions on the transfer of Registrable Securities or other securities of the Company imposed by, any other agreement including, but not limited to, the Stock Purchase Agreement or the Stockholders Agreement.

IN WITNESS WHEREOF, the undersigned have executed, or have caused to be executed, this Registration Rights Agreement on the date first written above.

ACTINIUM PHARMACEUTICALS, INC.

By:_____
Name: Maurits W. Geerlings, Sr
Title: President & CEO

GENERAL ATLANTIC INVESTMENTS LIMITED

By:_____
Name:
Title:

N.V. ORGANON

By:_____
Name: T. KAIFF
Title: PRESIDENT

By:_____
Name: K. Lijbers
Title: Director Finance & Control

ISOTOPIA B.V.

By:_____
Dr. Maurits W. Geerlings, Sr.
Title President

_____
Dr. Maurits W. Geerlings, Jr.

_____
Kenneth R. Givens

_____
Dr. Maurits W. Geerlings, Sr.

To subscribe for Common Stock and
Warrants to Purchase Shares of Common Stock
in the private offering of
ACTINIUM PHARMACEUTICALS, INC.

1. **Date and Fill** in the number of units (each unit consisting of 181,818 shares of common stock (the "**Common Stock**") and warrants (the "**Warrants**") in the form of an A Warrant to purchase 181,818 shares of the Common Stock and a B Warrant to purchase 90,909 shares of the Common Stock) ("**Units**") being subscribed for and **Complete and Sign** the Signature Page included in the Subscription Agreement.

2. **Initial** the Accredited Investor Certification attached to this Subscription Agreement.

3. **Complete and Sign** the Signature Page attached to this Subscription Agreement. **NOTICE: Please note that by executing the attached Subscription Agreement, you will deemed to have executed the Unit Purchase Agreement (Exhibit B to the Memorandum, as defined below), the 2012 Unit Investor Rights Agreement (Exhibit D to the Memorandum), the First Amended and Restated Stockholders Agreement (Exhibit E to the Memorandum), the A Warrant (Exhibit B-1 to the Unit Purchase Agreement), and the B Warrant (Exhibit B-2 to the Unit Purchase Agreement) (collectively the "Transaction Documents"), each of which are attached to the Memorandum, and will be treated for all purposes as if you did sign each such Transaction Document even though you may not have physically signed the signature pages to such documents**.

4. **Complete and Return** the attached Purchaser Questionnaire and, if applicable, Wire Transfer Authorization attached to this Subscription Agreement. Questions regarding completion of the subscription documents should be directed to Mr. F. Ryan Smith at (212) 697-5200.

5. **Fax** all forms to Mr. F. Ryan Smith at **(212) 297-0670** and then send all signed original documents with a check (if applicable) to:

   Mr. Ryan Smith
   Laidlaw & Co. (UK) Ltd.
   90 Park Avenue, 31st Floor
   New York, NY 10016

6. Please make your subscription payment payable to the order of "**Signature Bank, as Escrow Agent for Actinium Pharmaceuticals, Inc." Account No. 1501888938**.

For wiring funds directly to the escrow account, use the following instructions:

Signature Bank
261 Madison Avenue
New York, NY 10016
Acct. Name: Signature Bank as Escrow Agent for

Actinium Pharmaceuticals, Inc.

ABA Number: 026013576
SWIFT Code: SIGNUS33
A/C Number: 1501888938

FBO: **Purchaser Name**
Social Security Number
Address

ALL SUBSCRIPTION DOCUMENTS MUST BE FILLED IN AND SIGNED EXACTLY AS SET FORTH WITHIN.

SUBSCRIPTION AGREEMENT

FOR

ACTINIUM PHARMACEUTICALS, INC.

Actinium Pharmaceuticals, Inc.
c/o Laidlaw & Company (UK), Ltd.
90 Park Avenue, 31st Floor
New York, NY 10016

Ladies and Gentlemen:

1. Subscription. The undersigned (the "**Purchaser**") will purchase the number of units ("**Units**") of securities of Actinium Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), set forth on the signature page to this Subscription Agreement, at a purchase price of $100,000 per Unit, with each Unit consisting of (a) 181,818 shares of common stock of the Company ("**Common Stock**"), and (b) warrants (the "**Warrants**") consisting of (i) an A Warrant to purchase 181,818 shares of Common Stock at an exercise price of $0.55 per share for a period of 120 days following the final Closing of the Offering (each as hereinafter defined), and (ii) a B Warrant to purchase 90,909 shares of Common Stock at an exercise price of $0.825 per share for a period of 5 years following the final Closing of the Offering. The Units are being offered (the "**Offering**") by the Company pursuant to the offering terms set forth in the Company's Confidential Private Placement Memorandum, dated October 1, 2012, as may be amended and/or supplemented, from time to time (collectively, the "**Memorandum**").

The Units are being offered on a "*reasonable efforts, all or none*" basis with respect to the minimum of $5,000,000 (the "**Minimum Offering Amount**") and thereafter on a "*reasonable efforts*" basis up to the maximum of $15,000,000 (the "**Maximum Offering Amount**"); provided that the Company may increase the Maximum Offering Amount by an additional $5,000,000 (the "**Greenshoe Option**") in the sole discretion of Laidlaw & Company (UK) Ltd. ("**Laidlaw**"). The Units may be sold at one or more closings of the Offering (each a "**Closing**", and, collectively, the "**Closings**"), at any time during the Offering Period (defined hereafter); provided, however, that no Closing may be effectuated unless and until irrevocable subscriptions for at least the Minimum Offering Amount have been deposited in the Escrow Account (defined hereafter). The minimum investment amount that may be purchased by an investor is one Unit at a price of $100,000 (the "**Investor Minimum Investment**"); provided however, the Company and Laidlaw, in their mutual discretion, may accept an investor subscription for an amount less than the Investor Minimum Investment. The subscription for the Units will be made in accordance with and subject to the terms and conditions of this Subscription Agreement and the Memorandum.

All subscription funds will be held in a non-interest bearing escrow account in the Company's name at Signature Bank, 261 Madison Avenue, New York, New York 10016,

or with such other escrow agent as may be appointed by Laidlaw and the Company (the "**Escrow Account**").

The Units will be offered through November 30, 2012 commencing on the date of the Memorandum (the "**Initial Offering Period**"), which period may be extended without further notice to prospective investors by the Company and Laidlaw, in their mutual discretion, to a date not later than January 31, 2013 (the "**Final Termination Date**"), except that in the event the Maximum Offering Amount is sold on or before the Final Termination Date and Laidlaw determines to exercise the Greenshoe Option, the Final Termination Date may be extended to a date no later than February 28, 2013. This additional period, together with the Initial Offering Period, shall be referred to herein as the "**Offering Period**". In the event that (i) subscriptions for the Offering are rejected in whole (at the sole discretion of the Company), (ii) the Minimum Offering Amount has not been subscribed for prior to the expiration of the Initial Offering Period or, if extended, prior to the Final Termination Date or (iii) the Offering is otherwise terminated by the Company or Laidlaw prior to the expiration of the Initial Offering Period or, if extended, prior to the Final Termination Date, then the Escrow Agent will refund all subscription funds held in the Escrow Account to the persons who submitted such funds, without interest, penalty or deduction. If a subscription is rejected in part (at the sole discretion of the Company or Laidlaw) and the Company accepts the portion not so rejected, the funds for the rejected portion of such subscription will be returned without interest, penalty, expense or deduction.

The Company and Laidlaw each reserves the right (but is not obligated) to have its employees, agents, officers, directors and affiliates purchase Units in the Offering and all such purchases will be counted towards the Minimum Offering Amount and the Maximum Offering Amount.

The terms of the Offering are more completely described in the Memorandum and such terms are incorporated herein in their entirety. Certain capitalized terms used, but not otherwise defined herein, will have the respective meanings provided in the Memorandum.

2. **Payment.** The Purchaser encloses herewith a check payable to, or will immediately make a wire transfer payment to, "**Signature Bank, as Escrow Agent for Actinium Pharmaceuticals, Inc.**," in the full amount of the purchase price of the Units being subscribed for. Together with the check for, or wire transfer of, the full purchase price, the Purchaser is delivering a completed and executed Signature Page to this Subscription Agreement along with a completed and executed Accredited Investor Certification, which are annexed hereto. **By executing this Subscription Agreement, you will be deemed to have executed each of the Unit Purchase Agreement in the form of Exhibit B to the Memorandum (the "Purchase Agreement"), the 2012 Unit Investor Rights Agreement in the form of Exhibit D to the Memorandum, the First Amended and Restated Stockholders Agreement in the form of Exhibit E to the Memorandum, the A Warrant in the form of Exhibit B-1 to the Purchase Agreement, and the B Warrant in the form of Exhibit B-2 to the Purchase Agreement (collectively the "Transaction Documents"), and will be bound by the respective terms of each of them.**

3. **Deposit of Funds.** All payments made as provided in Section 2 hereof will be deposited by the Purchaser as soon as practicable with Signature Bank, as escrow agent (the "**Escrow Agent**"), or such other escrow agent appointed by Laidlaw and the Company, in a non-interest bearing escrow account (the "**Escrow Account**"). In the event that the Company does not effect a Closing during the Offering Period, the Escrow Agent will refund all subscription funds, without deduction and/or interest accrued thereon, and will return the subscription documents to each Purchaser. If the Company or Laidlaw rejects a subscription, either in whole or in part (at the sole discretion of the Company or Laidlaw), the rejected subscription funds or the rejected portion thereof will be returned promptly to such Purchaser without interest, penalty, expense or deduction.

4. **Acceptance of Subscription.** The Purchaser understands and agrees that the Company or Laidlaw, each in its sole discretion, reserves the right to accept this or any other subscription for the Units, in whole or in part, notwithstanding prior receipt by the Purchaser of notice of acceptance of this or any other subscription. The Company will have no obligation hereunder until the Company executes and delivers to the Purchaser an executed copy of the Purchase Agreement. If Purchaser's subscription is rejected in whole (at the sole discretion of the Company or Laidlaw), the Offering is terminated or the Minimum Offering Amount is not subscribed for and accepted prior to the expiration of the Initial Offering Period or, if extended, prior to the Final Termination Date, all funds received from the Purchaser will be returned without interest, penalty, expense or deduction, and this Subscription Agreement will thereafter be of no further force or effect. If Purchaser's subscription is rejected in part (at the sole discretion of the Company or Laidlaw) and the Company accepts the portion not so rejected, the funds for the rejected portion of such subscription will be returned without interest, penalty, expense or deduction, and this Subscription Agreement will continue in full force and effect to the extent such subscription was accepted.

5. **Representations and Warranties of the Purchaser.** The Purchaser hereby acknowledges, represents, warrants, and agrees as follows:

(a) None of the Common Stock, the Warrants or the shares of Common Stock of the Company issuable upon exercise of the Warrants (collectively referred to hereafter as the "**Securities**") are registered under the Securities Act of 1933, as amended (the "**Securities Act**"), or any state securities laws. The Purchaser understands that the offering and sale of the Securities is intended to be exempt from registration under the Securities Act, by virtue of Section 4(2) thereof and the provisions of Regulation D promulgated thereunder, based, in part, upon the representations, warranties and agreements of the Purchaser contained in this Subscription Agreement and the Purchase Agreement;

(b) The Purchaser and the Purchaser's attorney, accountant, purchaser representative and/or tax advisor, if any (collectively, "**Advisors**"), have received and have carefully reviewed the Memorandum, this Subscription Agreement, and each of the Transaction Documents and all other documents requested by the Purchaser or its Advisors, if any, and understand the information contained therein, prior to the execution of this Subscription Agreement;

(c) Neither the Securities and Exchange Commission (the "**Commission**") nor any state securities commission has approved or disapproved of the Securities or passed upon or endorsed the merits of the Offering or confirmed the accuracy or determined the adequacy of the Memorandum. The Memorandum has not been reviewed by any Federal, state or other regulatory authority. Any representation to the contrary may be a criminal offense;

(d) All documents, records, and books pertaining to the investment in the Securities including, but not limited to, all information regarding the Company and the Securities, have been made available for inspection and reviewed by the Purchaser and its Advisors, if any;

(e) The Purchaser and its Advisors, if any, have had a reasonable opportunity to ask questions of and receive answers from the Company's officers and any other persons authorized by the Company to answer such questions, concerning, among other related matters, the Offering, the Securities, the Transaction Documents and the business, financial condition, results of operations and prospects of the Company and all such questions have been answered by the Company to the full satisfaction of the Purchaser and its Advisors, if any;

(f) In evaluating the suitability of an investment in the Company, the Purchaser has not relied upon any representation or other information (oral or written) other than as stated in the Memorandum or as contained in documents so furnished to the Purchaser or its Advisors, if any, by the Company in writing;

(g) The Purchaser is unaware of, is in no way relying on, and did not become aware of the offering of the Securities through or as a result of, any form of general solicitation or general advertising including, without limitation, any article, notice, advertisement or other communication published in any newspaper, magazine or similar media or broadcast over television, radio or over the Internet, in connection with the offering and sale of the Securities and is not subscribing for the Securities and did not become aware of the Offering through or as a result of any seminar or meeting to which the Purchaser was invited by, or any solicitation of a subscription by, a person not previously known to the Purchaser in connection with investments in securities generally;

(h) The Purchaser has taken no action which would give rise to any claim by any person for brokerage commissions, finders' fees or the like relating to this Subscription Agreement or the transactions contemplated hereby (other than fees to be paid by the Company to Laidlaw, as described in the Memorandum);

(i) The Purchaser, either alone or together with its Advisors, if any, has such knowledge and experience in financial, tax, and business matters, and, in particular, investments in securities, so as to enable it to utilize the information made available to it in connection with the Offering to evaluate the merits and risks of an investment in the Securities and the Company and to make an informed investment decision with respect thereto;

(j) The Purchaser is not relying on the Company, Laidlaw or any of their respective employees or agents with respect to the legal, tax, economic and related

considerations of an investment in any of the Securities and the Purchaser has relied on the advice of, or has consulted with, only its own Advisors;

(k) The Purchaser is acquiring the Securities solely for such Purchaser's own account for investment and not with a view to resale or distribution thereof, in whole or in part. The Purchaser has no agreement or arrangement, formal or informal, with any person to sell or transfer all or any part of any of the Securities and the Purchaser has no plans to enter into any such agreement or arrangement;

(l) The Purchaser understands and agrees that purchase of the Securities is a high risk investment and the Purchaser is able to afford an investment in a speculative venture having the risks and objectives of the Company. The Purchaser must bear the substantial economic risks of the investment in the Securities indefinitely because none of the Securities may be sold, hypothecated or otherwise disposed of unless subsequently registered under the Securities Act and applicable state securities laws or an exemption from such registration is available. Legends will be placed on the certificates representing the Common Stock, the Warrants and the shares of Common Stock issuable upon exercise of the Warrants to the effect that such securities have not been registered under the Securities Act or applicable state securities laws and appropriate notations thereof will be made in the Company's books. The Purchaser understands that there is no public market for the Common Stock and Warrants to be issued in the Offering and the Company has no intention of seeking an active trading market for these Securities;

(m) The Purchaser has adequate means of providing for such Purchaser's current financial needs and foreseeable contingencies and has no need for liquidity from its investment in the Securities for an indefinite period of time;

(n) The Purchaser is aware that an investment in the Securities involves a number of very significant risks and has carefully read and considered the matters set forth in the Memorandum and, in particular, the matters under the caption "Risk Factors" therein and understands any of such risk may materially adversely affect the Company's operations and future prospects;

(o) The Purchaser is an "accredited investor" within the meaning of Regulation D, Rule 501(a), promulgated by the Securities and Exchange Commission under the Securities Act and has truthfully and accurately completed the Purchaser Questionnaire attached to this Subscription Agreement and will submit to the Company such further assurances of such status as may be reasonably requested by the Company;

(p) The Purchaser: (i) if a natural person, represents that the Purchaser has reached the age of 21 and has full power and authority to execute and deliver this Subscription Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof; (ii) if a corporation, partnership, or limited liability company, or association, joint stock company, trust, unincorporated organization or other entity, represents that such entity was not formed for the specific purpose of acquiring the Securities, such entity is duly organized, validly existing and in good standing under the laws of the state of its organization, the consummation of the transactions contemplated hereby is authorized by, and will not result in a violation of state law or its charter or other organizational documents, such entity has full power and authority to execute and

deliver this Subscription Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof and to purchase and hold the Securities, the execution and delivery of this Subscription Agreement has been duly authorized by all necessary action, this Subscription Agreement has been duly executed and delivered on behalf of such entity and is a legal, valid and binding obligation of such entity; or (iii) if executing this Subscription Agreement in a representative or fiduciary capacity, represents that it has full power and authority to execute and deliver this Subscription Agreement in such capacity and on behalf of the subscribing individual, ward, partnership, trust, estate, corporation, or limited liability company or partnership, or other entity for whom the Purchaser is executing this Subscription Agreement, and such individual, partnership, ward, trust, estate, corporation, or limited liability company or partnership, or other entity has full right and power to perform pursuant to this Subscription Agreement and make an investment in the Company, and represents that this Subscription Agreement constitutes a legal, valid and binding obligation of such entity. The execution and delivery of this Subscription Agreement will not violate or be in conflict with any order, judgment, injunction, agreement or controlling document to which the Purchaser is a party or by which it is bound;

(q) The Purchaser and its Advisors, if any, have had the opportunity to obtain any additional information, to the extent the Company had such information in its possession or could acquire it without unreasonable effort or expense, necessary to verify the accuracy of the information contained in the Memorandum including, but not limited to, the terms and conditions of the Securities as set forth therein and the Transaction Documents and all other related documents, received or reviewed in connection with the purchase of the Securities and have had the opportunity to have representatives of the Company provide them with such additional information regarding the terms and conditions of this particular investment and the financial condition, results of operations, business and prospects of the Company deemed relevant by the Purchaser or its Advisors, if any, and all such requested information, to the extent the Company had such information in its possession or could acquire it without unreasonable effort or expense, has been provided by the Company in writing to the full satisfaction of the Purchaser and its Advisors, if any;

(r) The Purchaser represents to the Company that any information which the undersigned has heretofore furnished or is furnishing herewith to the Company is complete and accurate and may be relied upon by the Company in determining the availability of an exemption from registration under Federal and state securities laws in connection with the offering of securities as described in the Memorandum;

(s) The Purchaser has significant prior investment experience, including investment in non-listed and non-registered securities. The Purchaser has a sufficient net worth to sustain a loss of its entire investment in the Company in the event such a loss should occur. The Purchaser's overall commitment to investments which are not readily marketable is not excessive in view of the Purchaser's net worth and financial circumstances and the purchase of the Securities will not cause such commitment to become excessive. This investment is a suitable one for the Purchaser;

(t) The Purchaser is satisfied that it has received adequate information with respect to all matters which it or its Advisors, if any, consider material to its decision to make this investment;

(u) The Purchaser acknowledges that any and all estimates or forward-looking statements or projections included in the Memorandum were prepared by the Company in good faith, but that the attainment of any such projections, estimates or forward-looking statements cannot be guaranteed, will not be updated by the Company and should not be relied upon;

(v) No oral or written representations have been made, or oral or written information furnished, to the Purchaser or its Advisors, if any, in connection with the offering of the Securities which are in any way inconsistent with the information contained in the Memorandum;

(w) Within five (5) days after receipt of a request from the Company, the Purchaser will provide such information and deliver such documents as may reasonably be necessary to comply with any and all laws and ordinances to which the Company is subject;

(x) THE SECURITIES OFFERED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OR THE SECURITIES LAWS OF CERTAIN STATES AND ARE BEING OFFERED AND SOLD IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. THE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER SAID ACT AND SUCH LAWS PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE COMMISSION, ANY STATE SECURITIES COMMISSION OR ANY OTHER REGULATORY AUTHORITY, NOR HAVE ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF THIS OFFERING OR THE ACCURACY OR ADEQUACY OF THE MEMORANDUM. ANY REPRESENTATION TO THE CONTRARY IS UNLAWFUL;

(y) In making an investment decision, investors must rely on their own examination of Company and the terms of the Offering, including the merits and risks involved. Investors should be aware that they will be required to bear the financial risks of this investment for an indefinite period of time;

(z) **(For ERISA plans only)** The fiduciary of the ERISA plan (the "**Plan**") represents that such fiduciary has been informed of and understands the Company's investment objectives, policies and strategies, and that the decision to invest "plan assets" (as such term is defined in ERISA) in the Company is consistent with the provisions of ERISA that require diversification of plan assets and impose other fiduciary responsibilities. The Purchaser or Plan fiduciary (a) is responsible for the decision to invest in the Company; (b) is independent of the Company and any of its affiliates; (c) is qualified to make such investment decision; and (d) in making such decision, the

Purchaser or Plan fiduciary has not relied on any advice or recommendation of the Company or any of its affiliates; and

(aa) The Purchaser has read in its entirety the Memorandum and all exhibits thereto, including, but not limited to, all information relating to the Company, and the Securities, and understands fully to its full satisfaction all information included in the Memorandum including, but not limited to, the Section entitled "Risk Factors".

6. **Representations and Warranties of the Company.** The representations and warranties contained in Section 3 of the Purchase Agreement to be entered into by the Company and the Purchasers shall be incorporated herein by reference and shall be deemed to be made under this Subscription Agreement.

7. **Indemnification.** The Purchaser agrees to indemnify and hold harmless the Company, Laidlaw and each of their respective officers, directors, managers, employees, agents, attorneys, control persons and affiliates from and against all losses, liabilities, claims, damages, costs, fees and expenses whatsoever (including, but not limited to, any and all expenses incurred in investigating, preparing or defending against any litigation commenced or threatened) based upon or arising out of any actual or alleged false acknowledgment, representation or warranty, or misrepresentation or omission to state a material fact, or breach by the Purchaser of any covenant or agreement made by the Purchaser herein or in any other document delivered in connection with this Subscription Agreement.

8. **Irrevocability; Binding Effect.** The Purchaser hereby acknowledges and agrees that the subscription hereunder is irrevocable by the Purchaser, except as required by applicable law, and that this Subscription Agreement will survive the death or disability of the Purchaser and will be binding upon and inure to the benefit of the parties and their heirs, executors, administrators, successors, legal representatives, and permitted assigns. If the Purchaser is more than one person, the obligations of the Purchaser hereunder will be joint and several and the agreements, representations, warranties and acknowledgments herein will be deemed to be made by and be binding upon each such person and such person's heirs, executors, administrators, successors, legal representatives and permitted assigns.

9. **Modification.** This Subscription Agreement will not be modified or waived except by an instrument in writing signed by the party against whom any such modification or waiver is sought.

10. **Notices.** Any notice or other communication required or permitted to be given hereunder will be in writing and will be mailed by certified mail, return receipt requested, or delivered by reputable overnight courier such as FedEx against receipt to the party to whom it is to be given (a) if to the Company, at the address set forth in the Purchase Agreement or (b) if to the Purchaser, at the address set forth on the signature page hereof (or, in either case, to such other address as the party will have furnished in writing in accordance with the provisions of this Section 10). Any notice or other communication given by certified mail will be deemed given at the time of certification thereof, except for a notice changing a party's address which will be deemed given at the

time of receipt thereof. Any notice or other communication given by overnight courier will be deemed given at the time of delivery.

11. **Assignability.** This Subscription Agreement and the rights, interests and obligations hereunder are not transferable or assignable by the Purchaser and the transfer or assignment of any of the Securities will be made only in accordance with all applicable laws.

12. **Applicable Law.** This Subscription Agreement will be governed by and construed under the laws of the State of New York as applied to agreements among New York residents entered into and to be performed entirely within New York. The parties hereto (1) agree that any legal suit, action or proceeding arising out of or relating to this Subscription Agreement will be instituted exclusively in New York State Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, (2) waive any objection which the parties may have now or hereafter to the venue of any such suit, action or proceeding, and (3) irrevocably consent to the jurisdiction of the New York State Supreme Court, County of New York, and the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the parties hereto further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the New York State Supreme Court, County of New York, or in the United States District Court for the Southern District of New York and agrees that service of process upon it mailed by certified mail to its address will be deemed in every respect effective service of process upon it, in any such suit, action or proceeding. THE PARTIES HERETO AGREE TO WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS SUBSCRIPTION AGREEMENT OR ANY DOCUMENT OR AGREEMENT CONTEMPLATED HEREBY.

13. **Blue Sky Qualification.** The purchase of Securities pursuant to this Subscription Agreement is expressly conditioned upon the exemption from qualification of the offer and sale of the Securities from applicable federal and state securities laws.

14. **Use of Pronouns.** All pronouns and any variations thereof used herein will be deemed to refer to the masculine, feminine, neuter, singular or plural as the identity of the person or persons referred to may require.

15. **Confidentiality.** The Purchaser acknowledges and agrees that any information or data the Purchaser has acquired from or about the Company not otherwise properly in the public domain, was received in confidence. The Purchaser agrees not to divulge, communicate or disclose, except as may be required by law or for the performance of this Subscription Agreement, or use to the detriment of the Company or for the benefit of any other person or persons, or misuse in any way, any confidential information of the Company, including any trade or business secrets of the Company and any business materials that are treated by the Company as confidential or proprietary, including, without limitation, confidential information obtained by or given to the Company about or belonging to third parties.

16. **Miscellaneous.**

(a) This Subscription Agreement, together with the other Transaction Documents, constitute the entire agreement between the Purchaser and the Company with respect to the subject matter hereof and supersede all prior oral or written agreements and understandings, if any, relating to the subject matter hereof. The terms and provisions of this Subscription Agreement may be waived, or consent for the departure therefrom granted, only by a written document executed by the party entitled to the benefits of such terms or provisions.

(b) Each of the Purchaser's and the Company's representations and warranties made in this Subscription Agreement will survive the execution and delivery hereof and delivery of the Securities.

(c) Each of the parties hereto will pay its own fees and expenses (including the fees of any attorneys, accountants, appraisers or others engaged by such party) in connection with this Subscription Agreement and the transactions contemplated hereby whether or not the transactions contemplated hereby are consummated.

(d) This Subscription Agreement may be executed in one or more counterparts each of which will be deemed an original, but all of which will together constitute one and the same instrument.

(e) Each provision of this Subscription Agreement will be considered separable and, if for any reason any provision or provisions hereof are determined to be invalid or contrary to applicable law, such invalidity or illegality will not impair the operation of or affect the remaining portions of this Subscription Agreement.

(f) Paragraph titles are for descriptive purposes only and will not control or alter the meaning of this Subscription Agreement as set forth in the text.

17. **Signature Page. It is hereby agreed by the parties hereto that the execution by the Purchaser of this Subscription Agreement, in the place set forth hereinbelow, will be deemed and constitute the agreement by the Purchaser to be bound by all of the terms and conditions hereof as well as by the Purchase Agreement and each of the other Transaction Documents, and will be deemed and constitute the execution by the Purchaser of all such Transaction Documents without requiring the Purchaser's separate signature on any of such Transaction Documents.**

[Remainder of page intentionally left blank.]

ANTI-MONEY LAUNDERING REQUIREMENTS

The USA PATRIOT Act

The USA PATRIOT Act is designed to detect, deter, and punish terrorists in the United States and abroad. The Act imposes new anti-money laundering requirements on brokerage firms and financial institutions. Since April 24, 2002 all brokerage firms have been required to have new, comprehensive anti-money laundering programs.

To help you understand theses efforts, we want to provide you with some information about money laundering and our steps to implement the USA PATRIOT Act.

What is money laundering?

Money laundering is the process of disguising illegally obtained money so that the funds appear to come from legitimate sources or activities. Money laundering occurs in connection with a wide variety of crimes, including illegal arms sales, drug trafficking, robbery, fraud, racketeering, and terrorism.

How big is the problem and why is it important?

The use of the U.S. financial system by criminals to facilitate terrorism or other crimes could well taint our financial markets. According to the U.S. State Department, one recent estimate puts the amount of worldwide money laundering activity at $1 trillion a year.

What are we required to do to eliminate money laundering?

Under new rules required by the USA PATRIOT Act, our anti-money laundering program must designate a special compliance officer, set up employee training, conduct independent audits, and establish policies and procedures to detect and report suspicious transaction and ensure compliance with the new laws.

As part of our required program, we may ask you to provide various identification documents or other information. Until you provide the information or documents we need, we may not be able to effect any transactions for you.

ACTINIUM PHARMACEUTICALS, INC.
SIGNATURE PAGE TO
SUBSCRIPTION AGREEMENT

Purchaser hereby elects to purchase a total of _____Units, each Unit consisting of 181,818 shares of Common Stock and Warrants in the form of an A Warrant to purchase 181,818 shares of Common Stock and a B Warrant to purchase 90,909 shares of Common Stock at a purchase price of $100,000 per Unit (NOTE: to be completed by the Purchaser).

Date (NOTE: To be completed by the Purchaser): _____, 2012

If the Purchaser is an INDIVIDUAL, and if purchased as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:

_____	_____
Print Name(s)	**Social Security Number(s)**
_____	_____
Signature(s) of Purchaser(s)	**Signature**
_____	_____
Date	**Address**

If the Purchaser is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:

_____	_____
Name of Partnership, Corporation, Limited Liability Company or Trust	**Federal Taxpayer Identification Number**
By:_____	_____
Name:	**State of Organization**
Title:	
_____	_____
Date	**Address**

AGREED AND ACCEPTED:

ACTINIUM PHARMACEUTICALS, INC.

By: _____ _____
Name: Date
Title:

ACTINIUM PHARMACEUTICALS, INC.
ACCREDITED INVESTOR CERTIFICATION

For Individual Investors Only
(All individual investors must *INITIAL* where appropriate. Where there are joint investors both parties must *INITIAL*):

Initial _____ I certify that I have a "net worth" of at least $1 million either individually or through aggregating my individual holdings and those in which I have a joint, community property or other similar shared ownership interest with my spouse. For purposes hereof, "net worth" shall be deemed to include all of your assets, liquid or illiquid (excluding the value of your principal residence), minus all of your liabilities (excluding the amount of indebtedness secured by your principal residence up to its fair market value.)

Initial _____ I certify that I have had an annual gross income for the past two years of at least $200,000 (or $300,000 jointly with my spouse) and expect my income (or joint income, as appropriate) to reach the same level in the current year.

For Non-Individual Investors
(all Non-Individual Investors must *INITIAL* where appropriate):

Initial _____ The undersigned certifies that it is a partnership, corporation, limited liability company or business trust that is 100% owned by persons who meet either of the criteria for Individual Investors, above.

Initial _____ The undersigned certifies that it is a partnership, corporation, limited liability company or business trust that has total assets of at least $5 million and was not formed for the purpose of investing in Company.

Initial _____ The undersigned certifies that it is an employee benefit plan whose investment decision is made by a plan fiduciary (as defined in ERISA §3(21)) that is a bank, savings and loan association, insurance company or registered investment adviser.

Initial _____ The undersigned certifies that it is an employee benefit plan whose total assets exceed $5,000,000 as of the date of the Subscription Agreement.

Initial _____ The undersigned certifies that it is a self-directed employee benefit plan whose investment decisions are made solely by persons who meet either of the criteria for Individual Investors, above.

Initial _____ The undersigned certifies that it is a U.S. bank, U.S. savings and loan association or other similar U.S. institution acting in its individual or fiduciary capacity.

Initial _____ The undersigned certifies that it is a broker-dealer registered pursuant to §15 of the Securities Exchange Act of 1934.

Initial _____ The undersigned certifies that it is an organization described in §501(c)(3) of the Internal Revenue Code with total assets exceeding $5,000,000 and not formed for the specific purpose of investing in Company.

Initial _____ The undersigned certifies that it is a trust with total assets of at least $5,000,000, not formed for the specific purpose of investing in Company, and whose purchase is directed by a person with such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment.

Initial _____ The undersigned certifies that it is a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality thereof, for the benefit of its employees, and which has total assets in excess of $5,000,000.

Initial _____ The undersigned certifies that it is an insurance company as defined in §2(a)(13) of the Securities Act of 1933, as amended, or a registered investment company.

ACTINIUM PHARMACEUTICALS, INC.
Purchaser Questionnaire
(Must be completed by Purchaser)

Section A - Individual Purchaser Information

Purchaser Name(s):
_____

Individual executing Profile or Trustee:
_____

Social Security Numbers / Federal I.D. Number:
_____

Date of Birth: _____ Marital Status: _____

Joint Party Date of Birth:_____
Investment Experience (Years): _____

Annual Income: _____
Liquid Net Worth:_____

Net Worth: _____

Investment Objectives ***(circle one or more):*** Long Term Capital Appreciation, Short Term Trading, Businessman's Risk, Income, Safety of Principal, Tax Exempt Income or other

Home Street Address:
_____

Home City, State & Zip Code:
_____

Home Phone: _____ Home Fax: _____

Home Email: _____

Employer:
_____

Employer Street Address:
_____

Employer City, State & Zip Code:
_____

Bus. Phone: _____ Bus. Fax: _____

Bus. Email: _____

Type of Business:
_____

LAIDLAW Account Executive / Outside Broker/Dealer:
_____

Please check if you are a FINRA member or affiliate of a FINRA member firm: _____

ACTINIUM PHARMACEUTICALS, INC.
Purchaser Questionnaire
(Must be completed by Purchaser)

Section B – Entity Purchaser Information

Purchaser Name(s):

_____

Authorized Individual executing Profile or Trustee:

_____

Social Security Numbers / Federal I.D. Number:

_____

Investment Experience (Years): _____

Annual Income: _____

Net Worth: _____

Was the Trust formed for the specific purpose of purchasing the Common Stock and Warrants?
[ ] Yes [ ] No

Principal Purpose (Trust)_____

Type of Business: _____

Investment Objectives ***(circle one or more):*** Long Term Capital Appreciation, Short Term Trading, Businessman's Risk, Income, Safety of Principal, Tax Exempt Income or other

Street Address:

_____

City, State & Zip Code:

_____

Phone: _____ Fax: _____

Email: _____

Laidlaw Account Executive / Outside Broker/Dealer:

_____

Section C – Form of Payment – Check or Wire Transfer

____ Check payable to "**SIGNATURE BANK, AS ESCROW AGENT FOR ACTINIUM PHARMACEUTICALS, INC.**

____ Wire funds from my outside account according to the "To subscribe for Units of Common Stock and Warrants to Purchase Shares of Common Stock in the private offering of ACTINIUM PHARMACEUTICALS, INC."

____ Wire funds from my LAIDLAW Account – See following page

____ The funds for this investment are rolled over, tax deferred from _____ within the Allowed 60-day window

Section D – Purchaser Instructions for Payments of any Dividends

☐ Please make any dividend and any other payment checks pursuant to the Units to "Sterne, Agee & Leach Inc. C/F **[Insert Client Name]**" and deliver such checks to Laidlaw so that they may deposit them into my Laidlaw brokerage account

☐ Please make out any dividend and any other payment checks pursuant to the Units in the registered name of the Purchaser set forth in the signature page to the Subscription Agreement for the Units and mail such checks to me at the address specified in such signature page

Section E – Securities Delivery Instructions (check one)

____ Please deliver my securities to Laidlaw for deposit into my brokerage account.

____ Please deliver my securities to the address listed in the above Purchaser Questionnaire.

____ Please deliver my securities to the below address:

_____
_____
_____
_____

Purchaser Signature(s) _____**Date**_____

Wire Transfer Authorization

TO: OPERATIONS MANAGER
LAIDLAW & CO. (UK) LTD.

RE: Client Wire Transfer Authorization
ACTINIUM PHARMACEUTICAL, INC.

DATE:_____

This memorandum authorizes the transfer of the following listed funds from my LAIDLAW Brokerage Account as follows:

LAIDLAW Brokerage Account # _____

Wire Amount $_____

SIGNATURE BANK
261 Madison Avenue
New York, NY 10016

ABA Number: 026013576
For Credit to Signature Bank, as Escrow Agent for
Actinium Pharmaceuticals, Inc.
Account No.: 1501888938

REFERENCE:

PURCHASER'S LEGAL NAME

_____

TAX ID NUMBER

_____

PURCHASER'S ADDRESS

_____

FBO: _____

Signature: _____

Signature: _____
(Joint Signature)

Exhibit 10.7

UNIT PURCHASE AGREEMENT

BY AND AMONG

ACTINIUM PHARMACEUTICALS, INC.

AND

THE PURCHASERS PARTY HERETO

October __, 2012

SCHEDULES AND EXHIBITS
TO
UNIT PURCHASE AGREEMENT

Schedule 3.1	Foreign Jurisdictions
Schedule 3.2	Subsidiaries; Joint Ventures, Partnerships
Schedule 3.3.3	Encumbered Shares
Schedule 3.3.4	Outstanding Options, Warrants and Stockholder Rights; Proxies; Stock Option Plans
Schedule 3.5	Financial Statements
Schedule 3.6	Absence of Liabilities
Schedule 3.7.1	Material Contracts
Schedule 3.7.4	Required Consents
Schedule 3.7.6	Acquisition Transactions
Schedule 3.9	Absence of Changes
Schedule 3.10	Title to Properties and Assets; Liens
Schedule 3.11.1	Owned Intellectual Property and Licensed Intellectual Property
Schedule 3.11.3	Outstanding Options or Rights to Acquire Intellectual Property
Schedule 3.11.4	Alleged Violations of Intellectual Property Rights
Schedule 3.11.10	Infringement of Intellectual Property Rights
Schedule 3.12	Compliance
Schedule 3.13	Litigation
Schedule 3.14	Tax Returns and Payments
Schedule 3.15.1	Employees
Schedule 3.15.2	Employee Claims
Schedule 3.16.1	Employee Benefit Plans
Schedule 3.16.2	Compliance with ERISA and the Code
Schedule 3.18	Leased Real Property
Schedule 3.19.1	Material Collaborators
Schedule 3.19.2	Material Suppliers
Schedule 3.21.2	Clinical Studies, Tests and Trials
Schedule 3.21.3	FDA, Government and Other Regulatory Correspondence
Schedule 3.21.10	FDA, Government and Other Regulatory Action Notice
Schedule 3.26	Insurance

Exhibit A	Schedule of Purchasers
Exhibit B-1	Form of A Warrant
Exhibit B-2	Form of B Warrant
Exhibit C	Form of Fifth Amended and Restated Certificate of Incorporation
Exhibit D	Funding Instructions
Exhibit E-1	Pre-Initial Closing Capitalization of the Company
Exhibit E-2	Post-Initial Closing Capitalization of the Company
Exhibit F	Form of Legal Opinion
Exhibit G	Form of Indemnification Agreement
Exhibit H	Form of 2012 Unit Investor Rights Agreement
Exhibit I	Form of First Amended and Restated Stockholders Agreement

ACTINIUM PHARMACEUTICALS, INC.
UNIT PURCHASE AGREEMENT

THIS UNIT PURCHASE AGREEMENT (the "***Agreement***") is entered into on October __, 2012 by and among Actinium Pharmaceuticals, Inc., a Delaware corporation (the "***Company***") and the purchasers identified on Exhibit A on the date hereof (which purchasers are hereinafter collectively referred to as the "***Purchasers***" and each individually as, a "***Purchaser***").

BACKGROUND

A. Unless otherwise defined in this Agreement, capitalized terms used in this Agreement shall have the respective meanings ascribed to such terms in Section 9.

B. The Company has authorized a total of 325,000,000 shares, consisting of: (1) 283,463,176 shares of Common Stock, $0.01 par value per share (the "***Common Stock***"), and (2) 41,536,824 shares of Preferred Stock, $0.01 par value per share of which (a) 1,000,000 shares are designated as Series A Convertible Participating Preferred Stock (the "***Series A Preferred Stock***"), (b) 4,711,247 shares are designated as Series B Preferred Stock (the "***Series B Preferred Stock***"), (c) 800,000 shares are designated as Series C-1 Preferred Stock (the "***Series C-1 Preferred Stock***"), (d) 666,667 shares are designated as Series C-2 Preferred Stock (the "***Series C-2 Preferred Stock***"), (e) 502,604 shares are designated as Series C-3 Preferred Stock (the "***Series C-3 Preferred Stock***"), (f) 4,250,000 shares are designated as Series C-4 Preferred Stock (the "***Series C-4 Preferred Stock***", and collectively with the Series C-1 Preferred Stock, Series C-2 Preferred Stock and Series C-3 Preferred Stock, the "***Series C Preferred Stock***"), (g) 3,000,000 shares (the "***Series D Shares***") are designated as Series D Preferred Stock (the "***Series D Preferred Stock***"); and, 26,606,306 shares (the "***Series E Shares***") are designated as Series E Preferred Stock (the "***Series E Preferred Stock***").

D. Each Purchaser desires to purchase units ("***Units***") of securities of the Company on the terms and conditions set forth herein.

E. The Company desires to issue and sell the Units to each Purchaser in one or more closings (each a "***Closing***" and collectively the "***Closings***") as set forth herein.

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, hereby agree as follows:

1. AGREEMENT TO SELL AND PURCHASE.

1.1 Authorization of Shares and Warrants. The board of directors of the Company has authorized (i) the sale of up to 200 Units, with each Unit consisting of 181,818 shares of Common Stock and warrants (the "***Warrants***") consisting of (a) an A Warrant to purchase 181,818 shares of Common Stock at an exercise price of $0.55 per share for a period of 120 days following the Final Closing, and (y) a B Warrant to purchase 90,909 shares of Common Stock at an exercise price of $0.825 per share for a period of 5 years following the Final Closing, (ii) the issuance of up to 36,363,600 shares of Common Stock included as part of the authorized Units hereunder, (ii) the issuance of Warrants for the purchase of up to 54,545,400 shares of Common Stock, and (ii) the reservation of 54,545,400 shares of the Common Stock to be issued upon exercise of the Warrants (the "***Warrant Shares***"). The Company Preferred Stock and Common Stock have the rights, preferences, privileges and restrictions set forth in the Fifth Amended and Restated Certificate of Incorporation of the Company in the form attached hereto as Exhibit C (the "***Certificate***").

1.2 Initial Sale and Purchase of Units. Subject to the terms and conditions hereof, and in reliance upon the representations, warranties and covenants contained herein, at the Initial Closing, the Company shall issue and sell to each Purchaser, and each Purchaser shall purchase from the Company, the number of Units set forth opposite such Purchaser's name on Exhibit A under the "Initial Units" column, at a purchase price of $100,000 per Unit (subject to appropriate and proportionate adjustment for stock dividends payable in shares of, stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to, the Common Stock, the "***Per Unit Purchase Price***"). The minimum purchase price by each Purchaser is one Unit, unless the Company and the Placement Agent agree, in their mutual discretion, to allow a Purchaser to purchase a partial Unit.

1.3 Subsequent Sales and Purchases of Common Stock. Subject to the terms and conditions hereof, and in reliance upon the representations, warranties and covenants contained herein, at each subsequent Closing, the Company shall issue and sell to each Purchaser who is identified as a "Subsequent Closing Purchaser" on Exhibit A (each, a "***Subsequent Closing Purchaser***"), and each Subsequent Closing Purchaser shall purchase from the Company, the number Units set forth opposite such Purchaser's name on Exhibit A at the Per Unit Purchase Price.

1.4 Issuance of Warrants. The Warrants shall be in form and substance substantially the same as the form of A Warrant in Exhibit B-1 and the form of B Warrant in Exhibit B-2.

2. CLOSINGS, DELIVERY AND PAYMENT.

2.1 Initial Closing. Subject to the conditions set forth in Section 5, the initial closing of the sale and purchase of the Units (the "***Initial Closing***"), shall take place electronically on such date and at such time as is agreed between the Company and the Placement Agent, in no event later than November 30, 2012, which date may be extended by the Company and the Placement Agent in their mutual discretion, to a date no later than January 31, 2013 (the "***Initial Closing Date***"). The Units sold at the Initial Closing are sometimes referred to herein as "***Initial Units***."

2.2 Subsequent Closings. Subject to the conditions set forth in Section 5, each Subsequent Closing shall take place electronically on such date, up to and including January 31, 2013, as the Company and the Placement Agent may designate (each a "***Subsequent Closing Date***"), except that if the Company has sold at least 150 Units on or before January 31, 2013, the Placement Agent may elect to place up to an additional 50 Units for sale in accordance with this Agreement until no later than February 28, 2013. Subject to the foregoing, at Subsequent Closings, the Company may sell in the aggregate up to the authorized number of Units less the number of Units sold in all prior Closings up to a maximum of 200 Units. The Units sold at the Subsequent Closings are sometimes referred to herein as "***Subsequent Units***."

2.3 Delivery; Payment. At each Closing, subject to the terms and conditions hereof, the Company will deliver to the Purchasers certificates representing the number of shares of Common Stock and corresponding Warrants to be purchased at such Closing by the Purchasers or the Subsequent Closing Purchasers, as the case may be, against payment of the full amount of the Purchase Price therefor in cash by wire transfer of immediately available funds in accordance with instructions attached hereto as Exhibit D, or as the Company shall otherwise direct. Unless otherwise requested by any Purchaser, each Purchaser will receive at such Closing, one (1) certificate registered in its name representing the shares of Common Stock included in the Units purchased by such Purchaser and one (1) A Warrant and one (1) B Warrant for each Unit purchased by such Purchaser or Subsequent Closing Purchaser, as the case may be, at such Closing. The Company and the Placement Agent, in their mutual discretion, may allow a Purchaser to purchase a partial Unit, in which case the Purchaser shall receive a certificate representing the appropriate number of shares of Common Stock included in such partial Unit and a partial A Warrant and partial B Warrant for the appropriate number of corresponding Warrant Shares.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each of the Purchasers that the statements made in this Section 3, except as qualified in the disclosure schedules referenced herein and attached hereto (the "***Schedules***"), are true and correct on the date hereof and shall be true and correct as of the Subsequent Closing, except as qualified by any updated Schedules delivered at the Subsequent Closing in accordance with Section 5.1.1 hereof, all of which qualifications in the Schedules attached hereto and updated Schedules delivered at the Subsequent Closing shall be deemed to be representations and warranties as if made hereunder. The Schedules shall be arranged to correspond to the numbered paragraphs contained in this Section 3, and the disclosure in any paragraph of the Schedules shall qualify other subsections in Section 3 only to the extent that it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other subsections. For purposes of this Section 3, "knowledge" shall mean the personal knowledge of any of the Company's officers or directors or what they would have known upon having made reasonable inquiry.

3.1 Organization, Good Standing and Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the corporate and general laws of the State of Delaware. Each of the other Actinium Entities is a corporation duly incorporated, validly existing and in good standing under the laws of its jurisdiction of incorporation. Each Actinium Entity has all requisite corporate power and authority to own and operate its properties and assets. The Company has all requisite corporate power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party, and to issue and sell the Units, and to carry out the provisions of this Agreement, the other Transaction Documents and the Certificate and to carry on its business as currently conducted and as currently proposed to be conducted. Each Actinium Entity is duly qualified, is authorized to do business and is in good standing as a foreign corporation in each jurisdiction listed on Schedule 3.1, each of which jurisdictions are the only jurisdictions in which the nature of such Actinium Entity's activities and properties (both owned and leased) makes such qualification necessary except where failure to be so qualified has not had, or could not reasonably be expected to have, a Material Adverse Effect.

3.2 Subsidiaries. Schedule 3.2 contains a true and complete list of each of the Company's Subsidiaries and their respective jurisdictions of organization. Except as set forth on Schedule 3.2, no Actinium Entity owns or controls any ownership interest or profits interest in any other corporation, limited liability company, limited partnership or other entity. The Company owns and controls as to all matters 100% of the outstanding ownership and profits interests in each Subsidiary listed on Schedule 3.2. Except as set forth on Schedule 3.2, no Actinium Entity is a participant in any joint venture, partnership or similar arrangement.

3.3 Capitalization Matters.

3.3.1. Immediately prior to the Initial Closing, the total authorized capital stock of the Company, consists of: (a) 283,463,176 shares of Common Stock, of which 2,407,805 shares are issued and outstanding; and (b) 41,536,824 shares of Preferred Stock, of which (i) 1,000,000 shares are designated as Series A Preferred Stock, all of which are issued and outstanding, (ii) 4,711,247 shares are designated as Series B Preferred Stock, all of which are issued and outstanding, (iii) 800,000 shares are designated as Series C-1 Preferred Stock, all of which are issued and outstanding, (iv) 666,667 shares are designated as Series C-2 Preferred Stock, all of which are issued and outstanding, (v) 502,604 shares are designated as Series C-3 Preferred Stock, all of which are issued and outstanding, (vi) 4,250,000 shares are designated as Series C-4 Preferred Stock, all of which are issued and outstanding, (vii) 3,000,000 shares are designated as Series D Preferred Stock, all of which shares are issued and outstanding, and (viii) 26,606,306 shares of Series E Preferred Stock, all of which are issued and outstanding.

3.3.2. Immediately prior to the Initial Closing, all issued and outstanding shares of the Company's Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C-1 Preferred Stock, Series C-2 Preferred Stock, Series C-3 Preferred Stock, Series C-4 Preferred Stock, Series D Preferred Stock, and Series E Preferred Stock (a) have been duly authorized and validly issued to the persons listed on Exhibit E-1 hereto in the amounts set forth thereon, (b) are fully paid and nonassessable, and (c) were issued in compliance with all applicable state and federal laws concerning the issuance of securities.

3.3.3. Upon consummation of the purchase and sale of the Units contemplated by this Agreement, (a) all issued and outstanding shares of the Company's Common Stock will be: (i) duly authorized, validly issued, fully paid and nonassessable, (ii) issued in compliance with all applicable state and federal laws concerning the issuance of securities, and (iii) except as set forth on Schedule 3.3.3, free of any Encumbrances; *provided, however*, that the Company's Units and the Warrant Shares may be subject to restrictions on transfer under state and/or federal securities laws; and (b) the Warrant Shares have been duly and validly authorized and reserved for issuance, and upon issuance in accordance with the Certificate will be fully paid and nonassessable. The rights, preferences, privileges and restrictions of the Company's Preferred Stock and Common Stock are as stated in the Certificate.

3.3.4. Except as set forth on Schedule 3.3.4, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal), or other agreements of any kind for the purchase or acquisition from any Actinium Entity of any of such Actinium Entity's securities. Except as set forth on Schedule 3.3.4, there are no proxies, stockholder agreements, or any other agreements between any Actinium Entity and any securityholder of such Actinium Entity or, to the knowledge of the Company, among any securityholders of any Actinium Entity, including agreements relating to the voting, transfer, redemption or repurchase of any securities of such Actinium Entity. Except for the Company's 2003 Stock Option Plan and the Company's 2012 Stock Option Plan, which are attached to Schedule 3.3.4, there are no stock option plans, stock purchase plans, equity incentive plans, stock appreciation rights, phantom stock or similar plans or rights applicable to any Actinium Entity. The total outstanding capital stock of the Company on a fully-diluted basis immediately following the Initial Closing is as set forth on Exhibit E-2.

3.4 Authorization; Binding Obligations. All actions by or on behalf of the Company necessary for the authorization of this Agreement and the other Transaction Documents, the performance of all obligations of the Company hereunder and thereunder at each Closing and the authorization, sale, issuance and delivery of the Units pursuant hereto have been taken. This Agreement (assuming due execution and delivery by the Purchasers) and the other Transaction Documents (assuming due execution and delivery by all other parties thereto), when executed and delivered, will be valid and binding obligations of the Company and enforceable against it in each case in accordance with its respective terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting enforcement of creditors' rights, (b) general principles of equity that restrict the availability of equitable remedies, and (c) to the extent that the enforceability of the indemnification provisions of Section 7 may be limited by applicable law. The sale of the Units and the subsequent exercise of the Warrants for Warrant Shares are not subject to any preemptive rights, rights of first refusal or other similar rights that have not expired or been waived or exercised as of each Closing. The execution, delivery and performance of, and the consummation of the transactions contemplated by, this Agreement and the other Transaction Documents, including without limitation the sale, issuance and delivery of the Units, have not resulted and will not result in (x) any violation of, or default under, or conflict with, or constitute, with or without the passage of time or the giving of notice or both, any violation of, or default under, or give rise to any right of termination, cancellation or acceleration under (i) any term or provision of (A) the Organizational Documents of any Actinium Entity, (B) any Contract, agreement, instrument, arrangement or understanding of any Actinium Entity, or (C) any Order to which any Actinium Entity is a party or by which any of them or any of their respective properties or assets are bound or (ii) any Requirement of Law applicable to any Actinium Entity or any of their respective properties or assets or (y) the creation of any Encumbrance upon any of the properties or assets of any Actinium Entity.

3.5 Financial Statements. The Company has delivered to the Purchasers (a) the consolidated audited financial statements (balance sheet, statement of operations, statement of stockholders' equity, and statement of cash flows) of the Actinium Entities as at December 31, 2010 and December 31, 2011 and (b) the consolidated unaudited financial statements (balance sheet, statement of operations, and statement of cash flows) of the Actinium Entities for the six months ended June 30, 2012 (the "***Statement Date***"), copies of which are attached hereto as part of Schedule 3.5 (collectively, the "***Financial Statements***"). The Financial Statements, together with the notes thereto, have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated, and present fairly in all material respects the consolidated financial condition and position of the Actinium Entities as of the date of such Financial Statements and the results of operations and changes in stockholders' equity and cash flows for the periods covered thereby, subject in the case of unaudited financial statements to normal year-end adjustments, which adjustments will not be materially adverse to the Actinium Entities, and an absence of notes.

3.6 Absence of Liabilities. No Actinium Entity has any Liabilities that are not reflected or disclosed in the balance sheet for the six month period ended on the Statement Date or set forth on Schedule 3.6 attached hereto, other than trade payables and accrued payroll incurred in the ordinary course of business consistent with past practice after such date and other liabilities incurred in the ordinary course of business consistent with past practice after such date that, individually or in the aggregate, has not had, or could not reasonably be expected to have, a material adverse effect on any of the business, properties, assets, financial condition, results of operations, prospects or Liabilities of the Actinium Entities, taken as a whole (a "***Material Adverse Effect***"). No Actinium Entity is a guarantor or indemnitor of any Liability of any other Person. Except for operating leases for personal or real property entered into in the ordinary course of business which do not require payments of more than $50,000 in the aggregate during any fiscal year, no Actinium Entity has issued any instruments, entered into any agreements, commitments or arrangements or incurred any obligations that would have, or would reasonably be expected to have, the effect of providing any Actinium Entity with "off balance sheet" financing.

3.7 Agreements; Action.

3.7.1. Disclosure. Schedule 3.7.1 sets forth a complete and accurate list of all the following Contracts to which any Actinium Entity or any of their respective properties or assets are a party or otherwise bound (each a "***Material Contract***"):

(a) Contracts not made in the ordinary course of business;

(b) each Contract pursuant to which (x) any Actinium Entity is granted rights to, or ownership in, any Intellectual Property by any other Person (excluding "shrink wrap" licenses for generally available, commercial, off-the-shelf Software that has not been modified), (y) any Actinium Entity purchases radioactive isotopes, components, raw materials, equipment, instruments, and other supplies and machinery that are material to the Actinium Entities' businesses, or supplies any other Person with any radioactive isotopes, components, raw materials, equipment, instruments, and other supplies and machinery, or (z) any Actinium Entity grants another person rights to, or ownership in, any Intellectual Property;

(c) Contracts relating to any feasibility, preclinical, clinical or other study, test or trial conducted by or on behalf of, or sponsored by, any Actinium Entity or in which any Actinium Entity or any of its drug compounds or pharmaceutical products (collectively, the "***Products***") is participating;

(d) Contracts relating to the manufacture or production of any of the Products;

(e) Contracts among one or more stockholders of any Actinium Entity which by their respective terms require performance after the date hereof;

(f) Contracts or commitments involving future expenditures, actual or potential, in excess of $50,000 after the date hereof;

(g) Contracts or commitments for the performance of services for any Actinium Entity by a third party which has a term of one (1) year or more;

(h) Contracts or commitments to perform services which obligates any Actinium Entity to perform services which has a term of one (1) year or more;

(i) Contracts or commitments relating to commission arrangements with any other Person;

(j) Contracts (A) to employ, engage or terminate officers or other personnel and other Contracts with present or former officers, directors and other personnel of any Actinium Entity which by their respective terms require performance after the date hereof, or (B) that will result in the payment by any Actinium Entity of, or the creation of any Liability on the part of any Actinium Entity to pay, any severance, termination, "golden parachute," or other similar payments to any present or former officers, directors or other personnel following termination of employment or engagement or otherwise;

(k) indemnification agreements, except for the Indemnification Agreements;

(l) any lease under which any Actinium Entity is either lessor or lessee of personal property requiring annual lease payments (including rent and any other charges) in excess of $50,000, and any lease under which any Actinium Entity is either lessor or lessee of any real property, including any Real Property Lease;

(m) promissory notes, loans, agreements, indentures, evidences of indebtedness, letters of credit, guarantees, or other instruments relating to an obligation to pay money, whether any Actinium Entity shall be the borrower, lender or guarantor thereunder (excluding credit provided by any Actinium Entity in the ordinary course of business to purchasers of its products or services and obligations to pay vendors in the ordinary course of business and consistent with past practice);

(n) Contracts containing covenants limiting the freedom of any Actinium Entity to engage in any activity anywhere in the world;

(o) Contracts between any Actinium Entity and any United States federal, state or local government or any foreign government, or any Governmental or Regulatory Authority, or any agency or department thereof, or with any educational institution or part thereof;

(p) any Contract or commitment for any charitable or political contribution by any Actinium Entity;

(q) any power of attorney granted by any Actinium Entity in favor of any Person;

(r) Contracts pertaining to any joint ventures, partnerships or similar arrangements;

(s) any Contract or other arrangement with an Affiliate; and

(t) any Contract not otherwise required to be listed pursuant to Subsections (a) – (s) above and with respect to which the consequences of a default, non-renewal or termination could reasonably be expected to have a Material Adverse Effect in the absence of a replacement Contract or arrangement therefor.

3.7.2. The Company has provided or made available true and complete copies of all of the Material Contracts to the Purchasers. Each of the Material Contracts is (a) in full force and effect, (b) a valid and binding obligation of, and is enforceable in accordance with its terms against the applicable Actinium Entity that is party thereto and, to the knowledge of the Company, each of the other parties thereto, except as such enforceability may be limited by bankruptcy, insolvency, moratorium or other law affecting the enforcement of creditors' rights generally or by general equitable principles, (c) except for those Material Contracts disclosed pursuant to Section 3.7.1(a) and identified as such, was made in the ordinary course of business, and (d) contains no provision or covenant prohibiting or limiting the ability of any Actinium Entity to operate its business in the manner in which it is currently operated.

3.7.3. To the best of the Company's knowledge, each Actinium Entity has in all material respects performed the obligations required to be performed by it to date under each Material Contract to which it is a party and is not in default or breach thereof, and no event or condition has occurred, whether with or without the passage of time or the giving of notice, or both, that would constitute such a breach or default. No Actinium Entity or any other party to any Material Contract has provided any notice to the other party or to any Actinium Entity, as applicable, of its intent to terminate, withdraw its participation in, or not renew any such Material Contract. No Actinium Entity has, and to the knowledge of the Company, no other party to any Material Contract has, threatened to terminate, withdraw from participation in, or not renew any such Material Contract. To the knowledge of the Company, no other party to any Material Contract is in breach or default under any provision thereof, and no event or condition has occurred, whether with or without the passage of time or the giving of notice, or both, that would constitute such a breach or default.

3.7.4. Except as set forth on Schedule 3.7.4, no Consent of any party to any Material Contract is required in connection with the transactions contemplated by this Agreement and the other Transaction Documents.

3.7.5. The execution, delivery and performance of this Agreement and the other Transaction Documents do not and will not (a) result in or give to any Person any right of termination, non-renewal, cancellation, withdrawal, acceleration or modification in or with respect to any Material Contract, (b) result in or give to any Person any additional rights or entitlement to increased, additional, accelerated or guaranteed payments under any such Material Contract or (c) result in the creation or imposition of any Liability or any Encumbrances upon the Actinium Intellectual Property or any Actinium Entity's assets under the terms of any such Material Contract.

3.7.6. Except as set forth on Schedule 3.7.6, no Actinium Entity or any representative thereof has engaged in the past twelve (12) months in any discussions regarding, and is not a party to or otherwise bound by any Contract in respect of, (a) any purchase, lease, license or other acquisition of any other Person, whether by equity purchase, merger, consolidation, reorganization or otherwise, or all or substantially all of the assets of any other Person, or the entering into by any Actinium Entity of any share exchange with any other Person, (b) Acquisition Transaction (as such term is defined in the Certificate) with respect to any of the Actinium Entities, or (c) Liquidation (as such term is defined in the Certificate) with respect to any of the Actinium Entities.

3.8 Intentionally omitted.

3.9 Changes. Except as set forth on Schedule 3.9, since the Statement Date, there has not been:

3.9.1. any effect, event, condition or circumstance (including, without limitation, the initiation of any litigation or other legal, regulatory or investigative proceeding) against the Company that individually or in the aggregate, with or without the passage of time, the giving of notice, or both, has had or could reasonably be expected to have a Material Adverse Effect;

3.9.2. any resignation or termination of any director, officer, employee or consultant of any Actinium Entity, and no Actinium Entity has received notification of any impending resignation from any such Person;

3.9.3. any material change in the contingent obligations of any Actinium Entity by way of guaranty, endorsement, indemnity, warranty or otherwise;

3.9.4. any material damage, destruction or loss adversely affecting the assets, properties, business, financial condition or prospects of any Actinium Entity, whether or not covered by insurance;

3.9.5. any waiver by any Actinium Entity of a valuable right or of any debt;

3.9.6. any change in any compensation arrangement or agreement with any employee, consultant, officer, director or stockholder of any Actinium Entity that would increase the cost of any such agreement or arrangement to any Actinium Entity by more than $10,000 in each instance;

3.9.7. any labor organization activity of the employees of any Actinium Entity;

3.9.8. any declaration or payment of any dividend or other distribution of the assets of any Actinium Entity;

3.9.9. any change in the accounting methods or practices followed by any Actinium Entity;

3.9.10. any development, event, change, condition or circumstance that constitutes, whether with or without the passage of time or the giving of notice or both, a default under any Actinium Entity's outstanding debt obligations; or

3.9.11. any Contract or commitment made by any Actinium Entity to do any of the foregoing.

3.10 Title to Properties and Assets; Liens, etc. Except as set forth on Schedule 3.10, each Actinium Entity has good and marketable title to the properties and assets it owns, and each Actinium Entity has a valid license in all properties and assets licensed by it, including the properties and assets reflected as owned in the most recent balance sheet included in the Financial Statements, and has a valid leasehold interest in its leasehold estates, in each case subject to no Encumbrance, other than those resulting from Taxes which have not yet become delinquent or those of the lessors of leased property or assets. All facilities, machinery, equipment, fixtures, vehicles and other properties owned, leased or used by each of the Actinium Entities are in good operating condition and repair, ordinary wear and tear excepted and are fit and usable for the purposes for which they are being used. Each Actinium Entity is in compliance with all terms of each lease to which it is a party or is otherwise bound.

3.11 Intellectual Property.

3.11.1. All registrations and applications for registration of all Owned Intellectual Property and all Licensed Intellectual Property (collectively, the "***Actinium Intellectual Property***") and applications in process for the Owned Intellectual Property and the Licensed Intellectual Property are identified, by Actinium Entity, on Schedule 3.11.1, identifying with respect to each such item of Actinium Intellectual Property, (a) the owner(s) thereof, (b) the jurisdiction(s) of registration, (c) the applicable registration or serial number, if any, (d) the date of expiration, if any, and (e) in the case of Licensed Intellectual Property, whether the applicable Actinium Entity's rights with respect thereto are exclusive. Except as set forth on Schedule 3.11.1 and identified as such, no Actinium Entity has licensed any Intellectual Property to or from any Person. All of the registrations and applications for registration of the Actinium Intellectual Property are valid, subsisting and in full force and effect, and all actions and payments necessary for the maintenance and continuation of such Actinium Intellectual Property have been taken or paid on a timely basis. Each Actinium Entity owns or possesses sufficient legal rights to use all of the Actinium Intellectual Property and the exclusive right to use all Owned Intellectual Property and all Licensed Intellectual Property which is identified in Schedule 3.11.1 as being exclusively licensed to any Actinium Entity.

3.11.2. To the knowledge of the Company, the business as currently conducted and as proposed to be conducted by the Actinium Entities has not and will not constitute any infringement of the Intellectual Property rights of any other Person. To the knowledge of the Company, the development of Product candidates and the use, manufacture or sale of the Actinium Entities' Products based on the Actinium Intellectual Property does not, and will not, infringe the Intellectual Property rights of any third Person. To the knowledge of the Company, no employee or agents of the Actinium Entities has misappropriated the Intellectual Property rights of any Person.

3.11.3. Except as set forth on Schedule 3.11.3, there are no outstanding options or other rights to acquire any Actinium Intellectual Property. To the knowledge of the Company, each licensor of the Licensed Intellectual Property is the sole and exclusive owner of such Licensed Intellectual Property and has the sole and exclusive right and authority to grant licenses to such Licensed Intellectual Property.

3.11.4. Except as set forth on Schedule 3.11.4, no Actinium Entity has received any communications alleging or suggesting that it has violated or, by conducting its business as currently conducted or proposed to be conducted, would infringe or misappropriate any of the Intellectual Property rights of any other Person.

3.11.5. It is not necessary to the business of any Actinium Entity, as currently conducted or as proposed to be conducted, to utilize any inventions, trade secrets or proprietary information of any of its employees, agents, developers, consultants or contractors made prior to their employment by or service to such Actinium Entity, except for inventions, trade secrets or proprietary information that have been assigned or licensed to any Actinium Entity.

3.11.6. Since the date of the Company's incorporation, there has not been any sale, assignment or transfer of any Actinium Intellectual Property or other intangible assets of any Actinium Entity.

3.11.7. No Actinium Intellectual Property is subject to any interference, reissue, reexamination, opposition or cancellation proceeding or any other Legal Proceeding or subject to or otherwise bound by any outstanding Order or Contract (other than in the case of any Licensed Intellectual Property, the Contract pursuant to which the Company licenses the rights to such Licensed Intellectual Property) that restricts in any manner the use, transfer or licensing thereof by any Actinium Entity or may affect the validity, use or enforceability of such Actinium Intellectual Property. No Actinium Entity has any knowledge of any fact or circumstance that would render any portion of the Actinium Intellectual Property invalid or unenforceable.

3.11.8. Each current and former officer, employee, agent, developer, consultant and contractor who (a) has had or has access to any Actinium Intellectual Property has executed a confidentiality and nondisclosure agreement that protects the confidentiality of the trade secrets of the Actinium Intellectual Property; and (b) contributed to or participated in the creation and/or development of the Actinium Intellectual Property either: (i) is a party to a "work made for hire" agreement under which one or more Actinium Entities is deemed to be the original owner/author of all right, title and interest in the Intellectual Property created or developed by such Person; or (ii) has executed an assignment or an agreement to assign in favor of one or more Actinium Entities of all such Person's right, title and interest in the Intellectual Property.

3.11.9. The execution and delivery of this Agreement and the other Transaction Documents and consummation of the transactions contemplated hereby and thereby will not result in the breach of, or create on behalf of any third party the right to terminate or modify, any license, sublicense, agreement or permission: (a) relating to or affecting any Actinium Intellectual Property; or (b) pursuant to which any Actinium Entity is granted a license or otherwise authorized to use any third party Intellectual Property.

3.11.10. Except as set forth on Schedule 3.11.10, to the knowledge of the Company, no Person is infringing, violating, misappropriating or making unauthorized use of any of the Actinium Intellectual Property. The Actinium Entities have enforced and taken such commercially reasonable steps as are necessary to protect and preserve all rights in the Actinium Intellectual Property against the infringement, violation, misappropriation and unauthorized use thereof by any Person. Each Actinium Entity has the right to: (a) bring actions for past, present and future infringement, dilution, misappropriation or unauthorized use of any Actinium Intellectual Property owned or licensed by such Actinium Entity, injury to goodwill associated with the use of any such Actinium Intellectual Property, unfair competition or trade practices violations of and other violation of such Actinium Intellectual Property; and (b) with respect to the Actinium Intellectual Property owned exclusively by any one or more Actinium Entities, receive all proceeds from the foregoing set forth in subsection (a) hereof, including, without limitation, licenses, royalties income, payments, claims, damages and proceeds of suit.

3.12 Compliance with Other Instruments. Except as set forth on Schedule 3.12, no Actinium Entity is in violation or default of any term of the Certificate, its Organizational Documents or its Bylaws, respectively (in each case, as amended to date), or of any provision of any Contract to which it is party or by which it is bound or of any Order applicable to any Actinium Entity, except for violations or defaults of any Contract (other than any Material Contract), which individually or in the aggregate has not had, or would not reasonably be expected to have, a Material Adverse Effect.

3.13 Litigation. Except as set forth on Schedule 3.13, there is no Legal Proceeding pending or, to the knowledge of the Company, threatened against any Actinium Entity or any investigation of an Actinium Entity, nor is the Company aware of any fact that would make any of the foregoing reasonably likely to arise. No Actinium Entity is a party or subject to the provisions of any Order. Except as set forth on Schedule 3.13, there is no Legal Proceeding by any Actinium Entity currently pending or that any Actinium Entity intends to initiate.

3.14 Tax Returns and Payments.

3.14.1. Except as set forth on Schedule 3.14, each Actinium Entity has timely filed all Tax Returns required to be filed by it, and each Actinium Entity has timely paid all Taxes owed (whether or not shown on any Tax Return). All such Tax Returns were complete and correct, and such Tax Returns correctly reflected the facts regarding the income, business, assets, operations, activities, status and other matters of such Actinium Entity and any other information required to be shown thereon. Each Actinium Entity has withheld and paid all Taxes required to have been withheld and paid in connection with amounts paid or owing to any Employee, creditor, independent contractor, shareholder, member or other third party. Each Actinium Entity has established adequate reserves for all Taxes accrued but not yet payable. No Actinium Entity has been audited by nor have issues been raised or adjustments made or proposed by any tax authority in connection with any such Taxes or Tax Returns. No deficiency assessment with respect to or proposed adjustment of any Actinium Entity's Taxes is pending or, to the knowledge of the Company, threatened. There is no tax lien (other than for current Taxes not yet due and payable), imposed by any taxing authority, outstanding against the assets, properties or the business of any Actinium Entity.

3.14.2. No Actinium Entity has agreed to make any adjustment under Section 481(a) of the Internal Revenue Code of 1986, as amended (the "***Code***") (or any corresponding provision of state, local or foreign tax law) by reason of a change in accounting method or otherwise, and no Actinium Entity will be required to make any such adjustment as a result of the transactions contemplated by this Agreement. No Actinium Entity has been or is a party to any tax sharing or similar agreement. No Actinium Entity is or has ever been, a party to any joint venture, partnership, limited liability company, or other arrangement or Contract which could be treated as a partnership for federal income tax purposes. No Actinium Entity is or has ever been, a "United States real property holding corporation" as that term is defined in Section 897 of the Code.

3.15 Employees.

3.15.1. All of the employees of each Actinium Entity (the "***Employees***") are identified, by Actinium Entity, on Schedule 3.15.1. Except as set forth on Schedule 3.15.1, (a) no Actinium Entity has, or has ever had any, collective bargaining agreements with any of its employees; (b) there is no labor union organizing activity pending or, to the knowledge of the Company, threatened with respect to any Actinium Entity; (c) no Employee has or is subject to any agreement or Contract to which any Actinium Entity is a party (including, without limitation, licenses, covenants or commitments of any nature) regarding his or her employment or engagement; (d) to the best of the Company's knowledge, no Employee is subject to Order, that would interfere with his or her duties to the Actinium Entities or that would conflict with the Actinium Entities' businesses as currently conducted and as proposed to be conducted; (e) no Employee is in violation of any term of any employment contract, proprietary information agreement or any other agreement relating to the right of any such Person to be employed by, or to contract with, any Actinium Entity; (f) to the best of the Company's knowledge, the continued employment by any Actinium Entity of its present Employees, and the performance of their respective duties to such Actinium Entity, will not result in any violation of any term of any employment contract, proprietary information agreement or any other agreement relating to the right of any such individual to be employed by, or to contract with, such Actinium Entity, and no Actinium Entity has received any written notice alleging that such violation has occurred; (g) no Employee or consultant has been granted the right to continued employment by or service to any Actinium Entity or to any compensation following termination of employment with or service to such Actinium Entity; and (h) no Actinium Entity has any present intention to terminate the employment or engagement or service of any officer or any significant Employee or consultant.

3.15.2. Except as set forth on Schedule 3.15.2, there are no outstanding or, to the knowledge of the Company, threatened claims against any Actinium Entity or any Affiliate (whether under federal or state law, under any employment agreement, or otherwise) asserted by any present or former Employee or consultant of an Actinium Entity. No Actinium Entity is in violation of any law or Requirement of Law concerning immigration or the employment of persons other than U.S. citizens.

3.16 Pension and Other Employee Benefit Plans.

3.16.1. There are set forth or identified in Schedule 3.16.1 all of the plans, funds, policies, programs and arrangements sponsored or maintained by any Actinium Entity on behalf of any Employee or former employee of any Actinium Entity (or any dependent or beneficiary of any such Employee or former employee) with respect to (a) deferred compensation or retirement benefits; (b) severance or separation from service benefits (other than those required by law); (c) incentive, performance, stock, share appreciation or bonus awards; (d) health care benefits; (e) disability income or wage continuation benefits; (f) supplemental unemployment benefits; (g) life insurance, death or survivor's benefits; (h) accrued sick pay or vacation pay; or (i) any other material benefit offered under any arrangement constituting an "employee benefit plan" within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("***ERISA***") and not excepted by Section 4 of ERISA (the foregoing being collectively called "***Employee Benefit Plans***"). Schedule 3.16.1 sets forth all such Employee Benefit Plans subject to the provisions of Section 412 of the Code as well as any "multi-employer plans" within the meaning of Section 3(37) of ERISA or Section 4001(a)(3) of ERISA. Except as set forth on Schedule 3.16.1, the transactions contemplated by this Agreement will not result in any payment or series of payments by the Purchasers or any Actinium Entity of an "excess parachute payment" within the meaning of Section 280G of the Code or any other severance, bonus or other payment on account of such transactions. Except as set forth on Schedule 3.16.1, none of the Employee Benefit Plans is under investigation or audit by either the United States Department of Labor, the Internal Revenue Service or any other Governmental or Regulatory Authority.

3.16.2. Except as set forth on Schedule 3.16.2, (a) each Actinium Entity has complied with its obligations under all applicable Requirements of Law including, without limitation, of ERISA and the Code with respect to such Employee Benefit Plans and all other arrangements that provide compensation or benefits to any Employee and the terms thereof, whether or not such person is directly employed by any Actinium Entity and (b) there are no pending or, to the knowledge of the Company, threatened actions or claims for benefits by any Employee, other than routine claims for benefits in the ordinary course of business. No Employee Benefit Plan provides any benefits to any former employees.

3.16.3. All Employee Benefit Plans that are intended to meet the requirements of Section 401(a) of the Code have been determined by the Internal Revenue Service to meet such requirements and have at all times operated in compliance with such requirements.

3.16.4. All employment Taxes, premiums for employee benefits provided through insurance, contributions to Employee Benefit Plans, and all other compensation and benefits to which Employees are entitled, have been timely paid or provided as applicable, and there is no liability for any such payments, contributions or premiums.

3.17 Registration Rights. Except as required pursuant to the Investor Rights Agreement, no Actinium Entity is under any obligation, or has granted any rights that have not been terminated, to register any of such Actinium Entity's currently outstanding securities or any of its securities that may hereafter be issued.

3.18 Real Property. No Actinium Entity has any interest in any real estate, except that the Actinium Entities lease the properties described on Schedule 3.18 (the "***Leased Real Property***"). The Leased Real Property is adequate for the operations of each of the Actinium Entities' businesses as currently conducted and as contemplated to be conducted. True and complete copies of the lease agreements (the "***Real Property Leases***") pertaining to the Leased Real Property have been delivered to the Purchasers. Except as set forth in Schedule 3.18, each Actinium Entity has paid all amounts due from it, and is not in default under any of the Real Property Leases and there exists no condition or event, which, with the passage of time, giving of notice or both, would reasonably be expected to give rise to a default under or breach of the Real Property Leases.

3.19 Relationships with Collaborators and Suppliers.

3.19.1. Collaborators. Set forth on Schedule 3.19.1 is a list, by Actinium Entity, of the material collaborators, research partners and other material service providers of the Actinium Entities. For the purposes of this Section "material collaborators" means scientific research collaborators who work with any Actinium Entity and whose work is expected to impact the development of the Actinium Intellectual Property and/or the Products, and includes, without limitation, any Person to whom any Actinium Entity has licensed any of the Actinium Intellectual Property (collectively, the " ***Collaborators***"). To the best of the Company's knowledge, the Actinium Entities maintain good working relationships with all of the Collaborators. The Company has delivered or made available to the Purchasers a list of each Actinium Entity's Contracts with the Collaborators as set forth on Schedule 3.19.1. Except as set forth on Schedule 3.19.1, none of such Collaborators has terminated or indicated an intention or plan or, to the knowledge of the Company, threatened to terminate its Contract with the applicable Actinium Entity, or to materially reduce the purchases of products or services from such Actinium Entity historically made by such Collaborator.

3.19.2. Suppliers. Set forth on Schedule 3.19.2 is a list of the material suppliers of the Actinium Entities. For the purposes of this Section, "material suppliers" means suppliers who provide an essential and material element necessary for the research and development of the Actinium Intellectual Property or required for the Products (collectively, the "***Suppliers***"). Except as set forth on Schedule 3.19.2, none of such Suppliers has terminated or indicated an intention or plan or, to the knowledge of the Company, threatened to terminate its Contract with any Actinium Entity, or to materially reduce the supply of products or services to any Actinium Entity historically provided by such Supplier.

3.20 Budget. The Company's budget most recently delivered by the Company to the Purchasers (the ***"Budget***") was prepared in good faith by the Company, and, based on the Company's experience and the assumptions used in preparing such Budget, constitutes a reasonable estimate of the costs and expenses expected to be incurred by the Actinium Entities during the time period covered thereby. Nothing has come to the attention of the Actinium Entities' management that would cause such estimated expenses to no longer be reasonable estimates. The assumptions used in the preparation of such estimated expenses were fair and reasonable when made and continue to be fair and reasonable as of the date hereof.

3.21 Permits; Regulatory.

3.21.1. No Regulatory Approval or Consent of, or any designation, declaration or filing with, any Governmental or Regulatory Authority or any other Person is required in connection with the valid execution, delivery and performance of this Agreement and the other Transaction Documents (including, without limitation, the issuance of the Units), except such Regulatory Approvals, Consents, designations, declarations or filings that have been duly and validly obtained or filed, or with respect to any filings that must be made after the Initial Closing or the Subsequent Closing as will be filed in a timely manner. Each Actinium Entity has all franchises, Permits, licenses and any similar authority necessary for the conduct of its business as now being conducted, including, without limitation, the Food and Drug Administration ("***FDA***") of the U.S. Department of Health and Human Services.

3.21.2. Schedule 3.21.2 lists each feasibility, preclinical, clinical and other study, test and trial being conducted by or on behalf of or sponsored by any Actinium Entity or in which any Actinium Entity or any of its Products is participating. The feasibility, preclinical, clinical and other studies, tests and trials conducted by or on behalf of or sponsored by any Actinium Entity or in which any Actinium Entity or any of the Actinium Entities' Products have participated were and, if still pending, are being conducted in accordance with standard medical and scientific research procedures, the protocols established and approved therefor and all applicable Requirements of Law. The Company has no knowledge of any other studies or tests the results of which are inconsistent with or otherwise call into question the results of the above referenced studies and tests.

3.21.3. Except as set forth on Schedule 3.21.3, no Actinium Entity and, to the knowledge of the Company, no other Person has received any notice or other correspondence or communication from the FDA or any other Governmental or Regulatory Authority or other Person requiring the termination, suspension or modification of any of the above referenced feasibility, preclinical or clinical studies, tests or trials or alleging a violation of any applicable Requirements of Law in connection therewith, or any Products.

3.21.4. The Actinium Entities have filed or caused to be filed and, to the knowledge of the Company, each other Person which has conducted or is conducting any feasibility, preclinical, clinical or other study, test or trial for or on behalf of the any Actinium Entity or any such study, test or trial that is being sponsored by any Actinium Entity has filed all required notices and other reports, including adverse experience reports.

3.21.5. The Actinium Entities, or their designated agents (for and on behalf of the Actinium Entities), own or have the exclusive right to use all material regulatory documents. For the purposes of this Section, "material regulatory documents" means all study, test and trial data and information and all correspondence and reports made to Governmental or Regulatory Authorities relating to or in connection with the Products or any feasibility, preclinical, clinical or other study, test or trial with respect thereto, which data, information, correspondence and reports are necessary or required to obtain approval from such Governmental or Regulatory Authority to conduct any feasibility, preclinical, clinical or other study, test or trial with respect to, or to manufacture, market or sell, any of the Products.

3.21.6. No Actinium Entity or, to the knowledge of the Company, any other Person has received any notice or other correspondence or communication that any Governmental or Regulatory Authority (including, without limitation, the FDA) has commenced or, to the knowledge of the Company, threatened to initiate any action to withdraw or to hinder approval for a Product or to limit the ability of any Actinium Entity or any other Person to manufacture (or to have manufactured for it by a third party) any Product or to request the recall of any Product, or commenced or threatened to initiate any action to enjoin production of such Product at any facility.

3.21.7. To the best of the Company's knowledge, all manufacturing and production operations conducted by the Actinium Entities (or by third parties on behalf of the Actinium Entities including, without limitation, any manufacturing or production being done by any third party in connection with any feasibility, preclinical, clinical or other study, test or trial for or on behalf of any Actinium Entity or any such study, test or trial that is being sponsored by any Actinium Entity or in which any Actinium Entity or any of the Actinium Entities' Products is participating), if any, relating to the manufacture or production of the Products are being conducted in compliance with all applicable Requirements of Law including to the extent mandated by relevant regulatory agencies, without limitation, current Good Manufacturing Practices or similar foreign requirements.

3.21.8. No Actinium Entity or, to the knowledge of the Company, any other Person has received (a) any reports of inspection observations, (b) any establishment inspection reports or (c) any warning letters or any other documents from the FDA or any other Governmental or Regulatory Authority relating to the Products and/or arising out of the conduct of any Actinium Entity or any Person which has conducted or is conducting any feasibility, preclinical, clinical or other study, test or trial for or on behalf of any Actinium Entity or any such study, test or trial that is being sponsored by any Actinium Entity or in which any Actinium Entity's Products is participating that assert a material violation or material non-compliance with any applicable Requirements of Law (including, without limitation, those of the FDA).

3.21.9. In addition:

(a) no Actinium Entity has made, or to the knowledge of the Company, any other Person that manufactures, tests or distributes any Product has made, with respect to any Product, an untrue statement of a material fact or fraudulent statement to the FDA or any other Governmental or Regulatory Authority or failed to disclose a material fact required to be disclosed to the FDA or any other Governmental or Regulatory Authority;

(b) to the knowledge of the Company, no officer, employee or agent of any Actinium Entity has made and, no officer, employee or agent of any other Person that manufactures, tests or distributes any Product has made, with respect to any Product, an untrue statement of a material fact or fraudulent statement to the FDA or any other Governmental or Regulatory Authority or failed to disclose a material fact required to be disclosed to the FDA or any other Governmental or Regulatory Authority;

(c) no Actinium Entity has been convicted of any crime;

(d) to the knowledge of the Company, no officer, employee or agent of any Actinium Entity has been convicted of any felony;

(e) no Actinium Entity or, to the knowledge of the Company, any other Person that manufactures, tests or distributes any Product has engaged in any conduct for which debarment is mandated by 21 U.S.C. §335a(a) or any similar Requirement of Law or authorized by 21 U.S.C. §335a(b) or any similar Requirement of Law;

(f) to the knowledge of the Company, no officer, employee or agent of any Actinium Entity, and no officer, employee or agent of any other Person that manufactures, tests or distributes any Product has engaged in any conduct for which debarment is mandated by 21 U.S.C. §335a(a) or any similar Requirement of Law or authorized by 21 U.S.C. §335a(b) or any similar Requirement of Law; and

(g) where and when applicable, each Actinium Entity and, to the knowledge of the Company, any other Persons that manufacture, test or distribute any Product are and have been in substantial compliance with the Medicare Anti-kickback Statute, 42 U.S.C. §1320a-7b(b) and implementing regulations codified at 42 C.F.R. §1001 and with all similar Requirements of Law.

3.21.10. Except as set forth on Schedule 3.21.10, no Actinium Entity or, to the knowledge of the Company, any other Person that manufactures, tests or distributes any Product, received any notice, correspondence or any other communication that the FDA or any other Governmental or Regulatory Authority has commenced, or threatened to initiate, any action to place a clinical hold on a clinical investigation of any Product, withdraw its approval that clinical investigations of any Product proceed or request the recall of any Product, or commenced, or overtly threatened to initiate, any adverse regulatory action against any Actinium Entity, the Person who manufactures, test or distributes the Product, or any of their respective agents, licensees or contract research organizations.

3.22 Environmental and Safety Laws. No Actinium Entity has caused or allowed, or contracted with any party for, the generation, use, transportation, treatment, storage or disposal of any Hazardous Substances in connection with the operation of its business or otherwise, except in compliance with all applicable Environmental Laws. To the best of the Company's knowledge, each Actinium Entity and the operation of its business are in compliance with all applicable Environmental Laws. To the best of the company's knowledge, all of the Leased Real Property and all other real property which any one or more Actinium Entities occupy (the "***Premises***") is in compliance with all applicable Environmental Laws and Orders or directives of any Governmental or Regulatory Authority having jurisdiction under such Environmental Laws, including, without limitation, any Environmental Laws or Orders or directives with respect to any cleanup or remediation of any release or threat of release of Hazardous Substances. Each Actinium Entity and the operation of its business is and has been in compliance with all applicable Environmental Laws. To the knowledge of the Company, there have occurred no and there are no events, conditions, circumstances, activities, practices, incidents, or actions that may give rise to any common law or statutory liability, or otherwise form the basis of any Legal Proceeding, any Order, any remedial or responsive action, or any investigation or study involving or relating to any Actinium Entity, based upon or related to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling, or the emission, discharge, release or threatened release into the environment, of any pollutants, contaminants, chemicals, or industrial, toxic or Hazardous Substance. To the knowledge of the Company, (a) there is no asbestos contained in or forming a part of any building, structure or improvement comprising a part of any of the Leased Real Property, (b) there are no polychlorinated byphenyls (PCBs) present, in use or stored on any of the Leased Real Property, and (c) no radon gas or the presence of radioactive decay products of radon are present on, or underground at any of the Leased Real Property at levels beyond the minimum safe levels for such gas or products prescribed by applicable Environmental Laws. Each Actinium Entity has obtained and is maintaining in full force and effect all necessary Permits, licenses and approvals required by all Environmental Laws applicable to the Premises and the business operations conducted thereon, and is in compliance with all such Permits, licenses and approvals. No Actinium Entity has caused or allowed a release, or a threat of release, of any Hazardous Substance onto, at or near the Premises, and, to the knowledge of the Company, neither the Premises nor any property at or near the Premises has ever been subject to a release, or a threat of release, of any Hazardous Substance.

3.23 Offering Valid. Assuming the accuracy of the representations and warranties of the Purchasers contained in the subscription agreements entered into by each Purchaser in connection with this Agreement, the offer, sale and issuance of the Common Stock and the Warrants will be exempt from the registration requirements of the Securities Act of 1933, as amended (the "***Securities Act***"), and will be exempt from registration and qualification) under applicable state securities laws.

3.24 Full Disclosure. All information furnished, to be furnished or caused to be furnished to the Purchasers with respect to any Actinium Entity, any of the Actinium Entities' businesses, assets, properties, financial position and performance and Liabilities applicable for the purposes of or in connection with this Agreement or any of the other Transaction Documents or any of the transactions contemplated hereby or thereby is or, if furnished after the date of this Agreement and before the applicable Closing Date, shall be true and complete in all material respects and, does not, and if furnished after the date of this Agreement and before such applicable Closing Date, shall not, contain any untrue statement of material fact or fail to state any material fact necessary to make such statement not misleading.

3.25 Minute Books. A copy of the minute books of the Company was made available to the Purchasers for inspection, which contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since January 1, 2002, and accurately reflect all actions taken by the directors (and any committee of the directors) and stockholders with respect to all transactions referred to in such minutes.

3.26 Insurance. Schedule 3.26 sets forth, by Actinium Entity, a list of all policies or binders of fire, casualty, liability, product liability, worker's compensation, vehicular or other insurance held by the Actinium Entities concerning its assets and/or its businesses (specifying for each such insurance policy the insurer, the policy number or covering note number with respect to binders, and each pending claim thereunder of more than $5,000). Such policies and binders are valid and in full force and effect. No Actinium Entity is in default with respect to any provision contained in any such policy or binder or has failed to give any notice or present any claim of which it has notice under any such policy or binder in a timely fashion. No Actinium Entity has received or given a notice of cancellation or non-renewal with respect to any such policy or binder. None of the applications for such policies or binders contain any material inaccuracy, and all premiums for such policies and binders have been paid when due. No Actinium Entity has knowledge of any state of facts or the occurrence of any event that could reasonably be expected to form the basis for any claim against it not fully covered by the policies referred to on Schedule 3.26. No Actinium Entity has received written notice from any of their respective insurance carriers that any insurance premiums will be materially increased after the applicable Closing Date or that any insurance coverage listed on Schedule 3.26 will not be available after such Closing Date on substantially the same terms as now in effect.

3.27 Investment Company Act. No Actinium Entity is an "investment company", or a company "controlled" by an "investment company", within the meaning of the Investment Company Act of 1940, as amended.

3.28 Foreign Payments; Undisclosed Contract Terms.

3.28.1. To the knowledge of the Company, no Actinium Entity has made any offer, payment, promise to pay or authorization for the payment of money or an offer, gift, promise to give, or authorization for the giving of anything of value to any Person in violation of the Foreign Corrupt Practices Act of 1977, as amended and the rules and regulations promulgated thereunder.

3.28.2. To the knowledge of the Company, there are no understandings, arrangements, agreements, provisions, conditions or terms relating to, and there have been no payments made to any Person in connection with any agreement, Contract, commitment, lease or other contractual undertaking of any Actinium Entity which are not expressly set forth in such contractual undertaking.

3.29 No Broker. Other than commissions (including fees, expenses and warrants) payable to the Placement Agent, no Actinium Entity has employed any broker or finder, or incurred any liability for any brokerage or finders fees in connection with the sale of the Units, or the Common Stock and Warrants underlying the Units pursuant to this Agreement or the other Transaction Documents.

3.30 Compliance with Laws. No Actinium Entity is in violation of, or in default under, any Requirement of Law applicable to such Actinium Entity, or any Order issued or pending against such Actinium Entity or by which such Actinium Entity or any of such Actinium Entities' properties are bound, except for such violations or defaults that have not had, and could not reasonably be expected to have, a Material Adverse Effect.

4. REPRESENTATIONS AND WARRANTIES OF THE PURCHASERS.

Each of the Purchasers hereby severally, and not jointly, represents and warrants to the Company that each such Purchaser's representations in the subscription agreement entered into in connection with this Agreement are true and correct as of the Closing.

5. CONDITIONS TO THE CLOSING.

5.1 Conditions to Purchasers' Obligations at the Closings. The obligations of the Purchasers to consummate the transactions contemplated herein to be consummated at the Initial Closing and of the Subsequent Closing, as the case may be, are subject to the satisfaction, on or prior to the date of such Closing, of the conditions set forth below and applicable thereto, which satisfaction shall be determined, or may be waived in writing, by the Purchasers or Subsequent Closing Purchasers, as the case may be, who are entitled to purchase at least a majority of the Common Stock to be purchased at such Closing:

5.1.1. Representations and Warranties; Performance of Obligations. Each of the representations and warranties of the Company contained herein shall be true and correct on and as of the Initial Closing Date. As of the Initial Closing, the Company shall have performed and complied with the covenants and provisions of this Agreement required to be performed or complied with by it at or prior to the Initial Closing Date. As to the Subsequent Closings, each of the representations and warranties of the Company contained herein shall be true and correct on and as of the Subsequent Closing Date, as qualified by any updated set of Schedules delivered at least five (5) days in advance of the Subsequent Closing to the Subsequent Closing Purchasers participating in the Subsequent Closing. As to the Subsequent Closings, the Company shall have performed and complied with the covenants and provisions of this Agreement and the other Transaction Documents required to be performed or complied with by it at or prior to the Subsequent Closing Date. At each Closing, the Purchasers participating in such Closing shall have received certificates of the Company dated as of the date of such Closing, signed by the president or chief executive officer of the Company, certifying as to the fulfillment of the conditions set forth in this Section 5.1 and the truth and accuracy of the representations and warranties of the Company contained herein (as qualified by the most recently delivered Schedules) as of the Initial Closing Date and, as to each Subsequent Closing, the Subsequent Closing Date.

5.1.2. Issuance in Compliance with Laws. The sale and issuance of the Units shall be legally permitted by all laws and regulations to which any of the Purchasers and the Company are subject.

5.1.3. Filings, Consents, Permits, and Waivers. The Company and the Purchasers shall have made all filings and obtained any and all Consents, Permits, waivers and Regulatory Approvals necessary for consummation of the transactions contemplated by the Agreement and the other Transaction Documents, except for such filings as are not due to be made until after the applicable Closing.

5.1.4. Reservation of Warrant Shares. The Warrant Shares shall have been duly authorized and reserved for issuance by the Board of Directors.

5.1.5. 2012 Unit Investor Rights Agreement. Concurrently with the issuance of the Units occurring at the Initial Closing, the 2012 Unit Investor Rights Agreement, substantially in the form attached hereto as Exhibit H (the "***Investor Rights Agreement***"), shall have been executed and delivered by the Company and each Purchaser.

5.1.6. First Amended and Restated Stockholders Agreement. Concurrently with the issuance of Common Stock and Warrants occurring at the Initial Closing and any Subsequent Closings, the First Amended and Restated Stockholders Agreement, substantially in the form attached hereto as Exhibit I (the "***Amended and Restated Stockholders Agreement***"), shall have been executed and delivered by each Purchaser.

5.1.7. Lock-Up Agreements. The officers and directors of the Company, and each stockholder of the Company owning 5% or more (giving effect to the conversion or exercise of all convertible securities held by each such stockholder) of the issued and outstanding Common Stock as of the date of such Closing (but not including any Purchaser of Units), and any other controlling persons, and the Placement Agent, shall have executed a form of lock-up agreement reasonably satisfactory to the Placement Agent and the Company whereby each such person agrees that following the consummation of the Pubco Transaction (as defined in the Certificate) each such person shall not sell or otherwise transfer any shares of Pubco (as defined in the Investor Rights Agreement) owned by such person until (i) the date that is the earlier of twelve (12) months from the closing date of the Pubco Transaction; or (ii) six (6) months following the effective date of the Registration Statement (as defined in the Investor Rights Agreement).

5.1.8. Legal Opinion. At each Closing, the Placement Agent and the Purchasers or the Subsequent Closing Purchasers, as the case may be, shall have received a legal opinion addressed to each of them, dated as of such Closing Date, substantially in the form attached hereto as Exhibit F from Goodsill Anderson Quinn Stifel LLP.

5.1.9. Non-Competition Agreements. All officers, employees and consultants of the Company shall have entered into non-competition and assignment of proprietary information and inventions agreements in form reasonably satisfactory to Purchasers.

5.1.10. Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closings and all documents and instruments incident to such transactions shall be reasonably satisfactory in substance and form to the Purchasers or the Subsequent Closing Purchasers, as the case may be, and their counsel, and the Purchasers or the Subsequent Closing Purchasers, as the case may be, and their counsel shall have received all such counterpart originals or certified or other copies of such documents as they may reasonably request.

5.1.11. Proceedings and Litigation. No action, suit or proceeding shall have been commenced by any Person against any party hereto seeking to restrain or delay the purchase and sale of the Units or the other transactions contemplated by this Agreement or any of the other Transaction Documents.

5.1.12. Filing of Certificate. As of the Initial Closing Date, the Certificate shall have been filed with the Secretary of State of the State of Delaware.

5.1.13. No Material Adverse Effect. As to the Subsequent Closing, since the Initial Closing Date, there shall not have occurred any effect, event, condition or circumstance (including, without limitation, the initiation of any litigation or other legal, regulatory or investigative proceeding) that individually or in the aggregate, with or without the passage of time, the giving of notice, or both, that has had, or could reasonably be expected to have, a Material Adverse Effect or which could adversely affect the Company's ability to perform its respective obligations under this Agreement or any of the other Transaction Documents.

5.1.14. Updated Disclosures. As to the Subsequent Closing, the Company must have delivered to the Purchasers an updated set of Schedules in accordance with Section 5.1.1 and such updated Schedules do not reveal any information or the occurrence, since the Initial Closing Date, of any effect, event, condition or circumstance, which individually, or in the aggregate, has had or could reasonably be expected to have, a Material Adverse Effect and do not include any state of facts that occur as a result of the breach by the Company of any of its obligations under this Agreement or any of the other Transaction Documents.

5.1.15. Payment of Purchase Price. As to the Initial Closing, each Purchaser shall have delivered to the Company the total purchase price to be paid for such Purchaser's Initial Units, in the amount set forth opposite such Purchaser's name on Exhibit A, which shall be no less than $5,000,000 in aggregate gross proceeds. As to each Subsequent Closing, each Subsequent Closing Purchaser shall have delivered to the Company the total purchase price to be paid for such Subsequent Closing Purchaser's Subsequent Units.

5.1.16. Delivery of Documents at the Initial Closing. The Company shall have executed and delivered the following documents, on or prior to the Initial Closing Date:

(a) Certificates. Certificates representing the Common Stock to be purchased and sold on the Initial Closing Date;

(b) Warrants: Executed Warrants, in substantially the form of Exhibits B-1 and B-2, for the Warrants to be issued on the Initial Closing Date;

(c) Legal Opinion. The legal opinion required by Section 5.1.8 hereof;

(d) Secretary's Certificate. A certificate of the Secretary of the Company (i) attaching and certifying as to the Certificate, (ii) attaching and certifying as to the Bylaws of the Company in effect at the Initial Closing, (iii) attaching and certifying as to copies of resolutions by the Board of Directors of the Company authorizing and approving this Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby including without limitation, the issuance and delivery of the Units and copies of minutes of the Company's 2012 Annual Stockholders Meeting authorizing and approving the transactions contemplated by this Agreement (collectively, the "***Minutes***"); and (iv) certifying as to the incumbency of the officers of the Company executing this Agreement and the other Transaction Documents; and

(e) Indemnification Agreements. Indemnification Agreements with each of the directors of the Company as of the Initial Closing substantially in the form attached hereto as Exhibit G.

5.1.17. Delivery of Documents at the Subsequent Closing. At the Subsequent Closing, the Company shall deliver, or shall cause to be delivered to the Subsequent Closing Purchasers the following documents, to be held in escrow pending the completion of the Subsequent Closing:

(a) Certificates. Certificates representing the Common Stock to be purchased and sold on the Subsequent Closing Date bearing the legends required to be placed on such certificates pursuant to the Transaction Documents;

(b) Warrants: Executed Warrants, in substantially the form of Exhibits B-1 and B-2, for the Warrants to be issued on the Subsequent Closing Date;

(c) Compliance Certificate. The certificate required by Section 5.1.16 hereof certifying that all representations and warranties made by the Company as of the Subsequent Closing Date are true, complete and correct as of the Subsequent Closing Date, as qualified by the updated Schedules delivered pursuant to Section 5.1.1 and that all covenants in this Agreement and the other Transaction Documents required to be performed by the Company prior to the Subsequent Closing Date have been so performed; and

(d) Legal Opinion. The legal opinion required by Section 5.1.7 hereof; and

(e) Indemnification Agreements. Indemnification Agreements, if any, for any newly-appointed directors of the Company since the Initial Closing substantially in the form attached hereto as Exhibit G.

(f) Secretary's Certificate. A Certificate of the Secretary of the Company (i) certifying that the resolutions by the Board of Directors of the Company authorizing and approving this Agreement and the other Transaction Documents delivered at the Initial Closing have not been modified in any way or rescinded and are otherwise in effect as of the Subsequent Closing, (ii) certifying as to the incumbency of the officers of the Company executing any documents contemplated by this Agreement to be executed and delivered by the Company at the Subsequent Closing, and (iii) attaching and certifying as to (x) the Certificate as in effect at the Subsequent Closing, and (y) the Bylaws of the Company in effect at the Subsequent Closing.

5.2 Conditions to Obligations of the Company at the Closings. The obligation of the Company to consummate the transactions contemplated herein to be consummated at the Initial Closing or the Subsequent Closing, as the case may be, is subject to the satisfaction, on or prior to the date of such Closing of the conditions set forth below and applicable thereto, any of which may be waived in writing by the Company:

5.2.1. Representations and Warranties; Performance of Obligations. Each of the representations and warranties of the Purchasers contained herein shall be true and correct on and as of the Initial Closing Date. As of the Initial Closing Date, the Purchasers shall have performed and complied with the covenants and provisions of this Agreement required to be performed or complied with by them at or prior to the Initial Closing Date. As to the Subsequent Closing, each of the representations and warranties of the Purchaser(s) contained herein shall be true and correct on and as of the Subsequent Closing Date. As to the Subsequent Closing, the Subsequent Closing Purchaser(s) shall have performed and complied with the covenants and provisions of this Agreement required to be performed and complied with by them at or prior to the Subsequent Closing Date.

5.2.2. Proceedings and Litigation. No action, suit or proceeding shall have been commenced by any Governmental Authority against any party hereto seeking to restrain or delay the purchase and sale of the Common Stock or the other transactions contemplated by this Agreement.

5.2.3. Qualifications. All Permits, if any, that are required in connection with the lawful issuance and sale of the Units pursuant to this Agreement shall be obtained and effective as of the Initial Closing or Subsequent Closing, as applicable.

6. COVENANTS OF THE PARTIES.

6.1 Filing of Certificate; Compliance. Prior to the Initial Closing, the Company shall file the Certificate with the Secretary of State of the State of Delaware, in accordance with Delaware law. The Company shall at all times from and after the Initial Closing Date, fully perform and observe all terms, conditions, provisions, and covenants required to be performed and observed by the Company pursuant to the Certificate.

6.2 Commercially Reasonable Efforts. Upon the terms and subject to the conditions set forth in this Agreement, the parties to this Agreement shall use their respective good faith commercially reasonable efforts to take, or cause to be taken, without any party being obligated to incur any material internal costs or make any payment or payments to any third party or parties which, individually or in the aggregate, are material and are not otherwise legally required to be made, all actions, and to do or cause to be done, and to assist and cooperate with the other parties in doing, all things necessary, proper or advisable for such party to consummate and make effective, in the most expeditious manner practicable, each Closing and the other transactions contemplated hereunder.

6.3 Post-Closing Filings. In connection with each Closing, the Company and the Purchasers, if applicable, agree to file all required forms or filings under applicable securities laws.

7. INDEMNIFICATION AND EXPENSES.

7.1 The Company Indemnification. The Company shall indemnify and hold harmless each Purchaser and any of such Purchaser's Affiliates and any Person which controls, is controlled by, or under common control with (within the meaning of the Securities Act) such Purchaser or any such Affiliate, and each of their respective directors and officers, and the successors and assigns and executors and estates of any of the foregoing (each, an "***Indemnified Party***", and collectively, the "***Indemnified Parties***") from and against all Indemnified Losses imposed upon, incurred by, or asserted against any of the Indemnified Parties resulting from, relating to or arising out of:

7.1.1. any representation or warranty made in this Agreement or any of the other Transaction Documents or in any certificate or other instrument delivered by or on behalf of the Company not being true and correct in any material respect when made;

7.1.2. any breach or non-fulfillment of any covenant or agreement to be performed by the Company under this Agreement or the other Transaction Documents;

7.1.3. any third party action or claim against any Indemnified Party arising out of any misrepresentation or breach described in Section 7.1.1 or Section 7.1.2; or

7.1.4. any third party action or claim relating in any way to the Indemnified Party's status as a security holder of the Company, as a Person which controls, is controlled by or under common control with (within the meaning of the Securities Act) any such Indemnified Party or as a director or officer of any of the foregoing (including, without limitation, any and all Indemnifiable Losses arising under the Securities Act, the Securities Exchange Act of 1934, as amended, or similar securities law, or any other Requirements of Law or otherwise, which relate directly or indirectly to the registration, purchase, sale or ownership of any securities of the Company or to any fiduciary obligation owed with respect thereto), including, without limitation, in connection with any action or claim relating to any action taken or omitted to be taken or alleged to have been taken or omitted to have been taken by such Indemnified Party as a security holder; provided that the Company shall not be obligated to indemnify or hold harmless any Indemnified Party under this Section 7.1.4 against any Indemnified Losses resulting from or arising out of any such action or claim if it has been adjudicated by a final and non-appealable determination of a court or other trier of fact of competent jurisdiction that such Indemnified Losses were the result of (a) a breach of such Indemnified Party's fiduciary duty, (b) any action or omission made by the Indemnified Party in bad faith, (c) such Indemnified Party's willful misconduct, or (d) any criminal action on the part of such Indemnified Party.

7.2 Attorneys' Fees and Expenses. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of this Agreement, the Investor Rights Agreement (Exhibit H), the First Amended and Restated Stockholders Agreement (Exhibit I) or the Fifth Amended and Restated Certificate of Incorporation (Exhibit C), the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled as determined by such court, equity or arbitration proceeding.

8. MISCELLANEOUS.

8.1 Governing Law; Submission to Jurisdiction; Waiver of Trial by Jury. This Agreement shall be governed in all respects by the laws of the State of New York without regard to the conflict of laws principles of the State of New York or any other jurisdiction. No suit, action or proceeding with respect to this Agreement or any of the Transaction Documents may be brought in any court or before any similar authority other than in a court of competent jurisdiction in the State of New York and the parties hereby submit to the exclusive jurisdiction of such courts for the purpose of such suit, proceeding or judgment. Each of the parties hereto hereby irrevocably waives any right which it may have had to bring such an action in any other court, domestic or foreign, or before any similar domestic or foreign authority and agrees not to claim or plead the same. Each of the parties hereto hereby irrevocably and unconditionally waives trial by jury in any legal action or proceeding in relation to this Agreement or any of the Transaction Documents and for any counterclaim therein.

8.2 Survival of Representations and Warranties. The representations and warranties made by the Company and the Purchasers herein at each Closing shall survive such Closing for a period of twelve (12) months. All statements contained in any certificate or other instrument delivered by or on behalf of any party to this Agreement, pursuant to or in connection with the transactions contemplated by this Agreement or any of the other Transaction Documents shall be deemed to be representations and warranties made by such party as of the date of such certificate or other instrument.

8.3 Successors and Assigns. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; *provided* that no party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement without the consent of each other party. Notwithstanding the foregoing (a) any Purchaser may assign or transfer, in whole or, from time to time, in part, the right to purchase all or any portion of the Units to one or more of its Affiliates (subject to Affiliate qualification as an Accredited Investor) (b) subject to the terms and conditions of the Stockholders Agreement, from and after the Initial Closing Date, any Purchaser or other holder of Common Stock may assign, pledge or otherwise transfer, in whole or from time to time in part, its rights hereunder to any Person who acquires any interest in any Common Stock and (c) any Purchaser may assign or transfer any of its rights or obligations under this Agreement, in whole or from time to time in part, to the Company or any other Purchaser or any Affiliate of any other Purchaser. As a condition of any transfer pursuant to this Section 8.3, the transferee must agree in writing for the benefit of all parties to this Agreement (which writing shall be in form and substance reasonably acceptable to all parties to this Agreement) to be bound by the terms and conditions of this Agreement and all other Transaction Documents with respect to any Common Stock being transferred hereunder.

8.4 Entire Agreement. This Agreement, the Exhibits and Schedules hereto, the other Transaction Documents and each of the Exhibits delivered pursuant thereto constitute the full and entire understanding and agreement between the parties hereto with regard to the subject matter hereof and thereof and no party hereto shall be liable or bound to any other party hereto in any manner by any representations, warranties, covenants and agreements except as specifically set forth herein and therein.

8.5 Severability. If any provision of the Agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

8.6 Amendment and Waiver. Any provision of this Agreement may be amended or waived if, but only if, such amendment or waiver is in writing and is signed by the Company and the Purchasers (and, to the extent of any assignment under Section 8.3 hereof, their respective permitted assigns and any permitted assigns thereof) holding a majority of the voting power of the then outstanding Common Stock and Warrant Shares purchased under this Agreement held by such holders, with each outstanding share of Common Stock having one vote and each outstanding Warrant Share having one vote.

8.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party, upon any breach, default or noncompliance by another party under this Agreement, the other Transaction Documents or the Certificate, shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of or in any similar breach, default or noncompliance thereafter occurring. Any waiver or approval of any kind or character on any Purchaser's part of any breach, default or noncompliance under this Agreement, the other Transaction Documents or under the Certificate or any waiver on such party's part of any provisions or conditions of the Agreement, the other Transaction Documents, or the Certificate must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, the other Transaction Documents, the Certificate, or otherwise afforded to any party, shall be cumulative and not alternative.

8.8 Notices. All notices, requests, demands and other communications given or made in accordance with the provisions of this Agreement shall be addressed (i) if to a Purchaser, at such Purchaser's address, fax number or email address, as furnished to the Company on the signature page below or as otherwise furnished to the Company by the Purchaser in writing, or (ii) if to the Company, to the attention of the President at such address, fax number or email address furnished to the Purchasers on the signature page below or as otherwise furnished by the Company in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

8.9 Expenses. The Company shall pay all costs and expenses that it incurs with respect to the preparation, negotiation, execution, delivery and performance of this Agreement, including, without limitation, any costs and expenses of its counsel. The Company shall pay the reasonable fees and expenses of independent counsel for the Placement Agent with respect to the negotiation and execution of this Agreement and the other Transaction Documents.

8.10 Titles and Subtitles. The titles of the sections and subsections of the Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

8.11 Counterparts; Execution by Facsimile Signature. This Agreement may be executed in any number of counterparts (including execution by facsimile), each of which shall be an original, but all of which together shall constitute one instrument. This Agreement may be executed by facsimile signature(s) which shall be binding on the party delivering same, to be followed by delivery of originally executed signature pages.

8.12 Acknowledgment. Any investigation or other examination that may have been made at any time by or on behalf of a party to whom representations and warranties are made in this Agreement or in any other Transaction Documents shall not limit, diminish, supersede, act as a waiver of, or in any other way affect the representations, warranties and indemnities contained in this Agreement and the other Transaction Documents, and the respective parties may rely on the representations, warranties and indemnities made to them in this Agreement and the other Transaction Documents irrespective of and notwithstanding any information obtained by them in the course of any investigation, examination or otherwise, whether before or after any Closing.

8.13 Publicity. Except as otherwise required by law or applicable stock exchange rules, no announcement or other disclosure, public or otherwise, concerning the transactions contemplated by this Agreement shall be made, either directly or indirectly, by any party hereto which mentions another party (or parties) hereto without the prior written consent of such other party (or parties), which consent shall not be unreasonably withheld, delayed or conditioned.

8.14 No Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to confer on any person other than the parties hereto or their respective successors and assigns any rights, remedies, obligations or Liabilities under or by reason of this Agreement.

8.15 Pronouns. All pronouns contained herein, and any variations thereof, shall be deemed to refer to the masculine, feminine or neutral, singular or plural, as to the identity of the parties hereto may require.

9. DEFINITIONS.

As used in this Agreement, the following terms shall have the meanings herein specified:

9.1 "***Actinium Entities***" shall mean the Company and its direct and indirect Subsidiaries, collectively.

9.2 "***Actinium Entity***" shall mean any Person which comprises part of the Actinium Entities.

9.3 "***Actinium Intellectual Property***" shall have the meaning set forth in Section 3.11.1.

9.4 "***Affiliate***" shall mean, with respect to any Person specified: (i) any Person that directly or indirectly through one or more intermediaries controls, is controlled by or under common control with the Person specified; (ii) any director, officer, or Subsidiary of the Person specified; and (iii) the spouse, parents, children, siblings, mothers-in-law, fathers-in law, sons-in-law, daughters-in-law, brothers-in-law, and sisters-in-law of the Person specified, whether arising by blood, marriage or adoption, and any Person who resides in the specified Person's home. For purposes of this definition and without limitation to the previous sentence, (x) "control" (including, with correlative meanings, the terms "controlled by" and "under common control with") of a Person means the power, direct or indirect, to direct or cause the direction of management and policies of such Person, whether through ownership of voting securities, by contract or otherwise, and (y) any Person beneficially owning, directly or indirectly, more than ten percent (10%) or more of any class of voting securities or similar interests of another Person shall be deemed to be an Affiliate of that Person.

9.5 "***Agreement***" shall have the meaning set forth in the preamble to this Agreement.

9.6 "***Budget***" shall have the meaning set forth in Section 3.20.

9.7 "***Certificate***" shall have the meaning set forth in Section 1.1.

9.8 "***Closing***" shall mean the Initial Closing or the Subsequent Closing, as applicable.

9.9 "***Code***" shall have the meaning set forth in Section 3.14.2.

9.10 "***Collaborators***" shall have the meaning set forth in Section 3.19.1.

9.11 "***Closing Date***" shall mean the Initial Closing Date or the Subsequent Closing Date, as applicable.

9.12 "***Common Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.13 "***Company***" shall have the meaning set forth in the preamble to this Agreement.

9.14 "***Company Preferred Stock***" shall mean the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock, collectively.

9.15 "***Consents***" shall mean any consents, waivers, approvals, authorizations, or certifications from any Person or under any Contract, Organizational Document or Requirement of Law, as applicable.

9.16 "***Contracts***" shall mean any indentures, indebtedness, contracts, leases, agreements, instruments, licenses, undertakings and other commitments, whether written or oral.

9.17 "***Warrant Shares***" shall have the meaning set forth in Section 1.1.

9.18 "***Copyrights***" shall mean all copyrights, copyrightable works, mask works and databases, including, without limitation, any computer software (object code and source code), Internet web-sites and the content thereof, and any other works of authorship, whether statutory or common law, registered or unregistered, and registrations for and pending applications to register the same including all reissues, extensions and renewals thereto, and all moral rights thereto under the laws of any jurisdiction.

9.19 "***Employees***" shall have the meaning set forth in 3.15.1.

9.20 "***Employee Benefit Plans***" shall have the meaning set forth in Section 3.16.1.

9.21 "***Encumbrances***" shall mean any security interests, liens, encumbrances, pledges, mortgages, conditional or installment sales Contracts, title retention Contracts, transferability restrictions and other claims or burdens of any nature whatsoever.

9.22 "***Environmental Laws***" shall mean any Federal, state or local law or ordinance or Requirement of Law or regulation pertaining to the protection of human health or the environment, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Sections 9601, et seq., the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Sections 11001, et seq., and the Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901, et seq.

9.23 "***ERISA***" shall have the meaning set forth in Section 3.16.1.

9.24 "***FDA***" shall have the meaning set forth in Section 3.21.1.

9.25 "***Final Closing***" shall mean the last Closing under this Agreement.

9.26 "***Financial Statements***" shall have the meaning set forth in Section 3.5.

9.27 "***Governmental or Regulatory Authority***" shall mean any court, tribunal, arbitrator, authority, agency, commission, official or other instrumentality of the government of the United States or of any foreign country, any state or any political subdivision of any such government (whether state, provincial, county, city, municipal or otherwise).

9.28 "***Hazardous Substances***" shall mean oil and petroleum products, asbestos, polychlorinated biphenyls, urea formaldehyde and any other materials classified as hazardous or toxic under any Environmental Laws.

9.29 "***Indemnification Agreements***" means the Indemnification Agreements with directors of the Company in the form attached hereto as Exhibit G.

9.30 "***Indemnified Losses***" shall mean all losses, Liabilities, obligations, claims, demands, damages, penalties, settlements, causes of action, costs and expenses arising out of any third party claim or action against an Indemnified Party, including, without limitation, the actual costs paid in connection with an Indemnified Party's investigation and evaluation of any claim or right asserted against such Indemnified Party and all reasonable attorneys', experts' and accountants' fees, expenses and disbursements and court costs including, without limitation, those incurred in connection with the Indemnified Party's enforcement of the indemnification provisions of Section 7 of this Agreement.

9.31 "***Indemnified Party***" shall have the meaning set forth in Section 7.1.

9.32 "***Initial Closing***" shall have the meaning set forth in Section 2.1.

9.33 "***Initial Closing Date***" shall have the meaning set forth in Section 2.1.

9.34 "***Initial Units***" shall have the meaning set forth in Section 2.1.

9.35 "***Intellectual Property***" shall mean all Copyrights, Patents, Trademarks, technology, trade secrets, know-how, inventions, methods, techniques and other intellectual property.

9.36 ***"Investor Rights Agreement***" shall have the meaning set forth in Section 5.1.5.

9.37 "***Leased Real Property***" shall have the meaning set forth in Section 3.18.

9.38 "***Legal Proceeding***" shall mean any action, suit, arbitration, claim or investigation by or before any Governmental or Regulatory Authority, any arbitration or alternative dispute resolution panel, or any other legal, administrative or other proceeding.

9.39 "***Liabilities***" shall mean all obligations and liabilities including, without limitation, direct or indirect indebtedness, guaranties, endorsements, claims, losses, damages, deficiencies, costs, expenses, or responsibilities, in any of the foregoing cases, whether fixed or unfixed, known or unknown, asserted or unasserted, choate or inchoate, liquidated or unliquidated, or secured or unsecured.

9.40 "***Licensed Intellectual Property***" shall mean all Copyrights, Patents, Trademarks, technology rights and licenses, trade secrets, know-how, inventions, methods, techniques and other intellectual property any one or more Actinium Entities have or has the right to use in connection with its business or their respective businesses, as applicable, pursuant to license, sublicense, agreement or permission.

9.41 "***Material Adverse Effect***" shall have the meaning set forth in Section 3.6.

9.42 "***Material Contract***" shall have the meaning set forth in Section 3.7.1.

9.43 "***Order***" shall mean any judgment, order, writ, decree, stipulation, injunction or other determination whatsoever of any Governmental or Regulatory Authority, arbitrator or any other Person whose finding, ruling or holding is legally binding or is enforceable as a matter of right (in any case, whether preliminary or final and whether voluntarily imposed or consented to).

9.44 "***Organizational Documents***" shall mean, with respect to any Person, such Person's articles or certificate of incorporation, by-laws or other governing or constitutive documents, if any.

9.45 "***Organon***" shall mean N.V. Organon, a Netherlands corporation.

9.46 "***Owned Intellectual Property***" shall mean all Copyrights, Patents, Trademarks, technology, trade secrets, know-how, inventions, methods, techniques and other intellectual property owned by the Company or any of its Subsidiaries.

9.47 "***Patents***" shall mean patents and patent applications (including, without limitation, provisional applications, utility applications and design applications), including, without limitation, reissues, patents of addition, continuations, continuations-in-part, substitutions, additions, divisionals, renewals, registrations, confirmations, re-examinations, certificates of inventorship, extensions and the like, any foreign or international equivalent of any of the foregoing, and any domestic or foreign patents or patent applications claiming priority to any of the above.

9.48 "***Permits***" shall mean all licenses, permits, certificates of authority, authorizations, approvals, registrations, franchises, rights, Orders, qualifications and similar rights or approvals granted or issued by any Governmental or Regulatory Authority relating to the Business.

9.49 "***Per Unit Purchase Price***" shall have the meaning set forth in Section 1.2.

9.50 "***Person***" shall mean any individual, corporation, partnership, firm, joint venture, association, limited liability company, limited liability partnership, joint-stock company, trust, unincorporated organization or Governmental or Regulatory Authority.

9.51 "***Placement Agent***" shall mean Laidlaw & Company (UK) Ltd.

9.52 "***Preferred Stock***" shall mean shares of the Company's Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock.

9.53 "***Premises***" shall have the meaning set forth in Section 3.22.

9.54 "***Products***" shall have the meaning set forth in Section 3.7.1(c).

9.55 "***Proportionate Percentage***" shall mean, as to each Subsequent Closing Purchaser, the percentage set forth opposite such Subsequent Closing Purchaser's name on Exhibit A.

9.56 "***Purchasers***" and "***Purchaser***" shall have the meaning set forth in the preamble to this Agreement.

9.57 "***Real Property Leases***" shall have the meaning set forth in Section 3.18.

9.58 "***Regulatory Approvals***" shall mean all Consents from all Governmental or Regulatory Authorities.

9.59 "***Requirement of Law***" shall mean any provision of law, statute, treaty, rule, regulation, ordinance or pronouncement having the effect of law, and any Order.

9.60 "***Schedules***" shall have the meaning set forth in the preamble to Section 3.

9.61 "***Securities Act***" shall have the meaning set forth in Section 3.23.

9.62 "***Series A Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.63 "***Series B Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.64 "***Series C Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.65 "***Series C-1 Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.66 "***Series C-2 Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.67 "***Series C-3 Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.68 "***Series C-4 Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.69 "***Series D Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.70 "***Series D Shares***" shall have the meaning set forth in the Background section of this Agreement

9.71 "***Series E Shares***" shall have the meaning set forth in the Background section of this Agreement.

9.72 "***Series E Preferred Stock***" shall have the meaning set forth in the Background section of this Agreement.

9.73 "***Statement Date***" shall have the meaning set forth in Section 3.5.

9.74 "***Subsequent Closing***" shall mean the funding which occurs on the Subsequent Closing Date.

9.75 "***Subsequent Closing Date***" shall mean the date that the Company selects by not less than 10 days' prior written notice to the Subsequent Closing Purchasers or such other date as the Company and the Subsequent Closing Purchasers who are entitled to purchase at least a majority of the Subsequent Common Stock to be purchased at the Subsequent Closing may mutually agree in writing.

9.76 "***Subsequent Closing Purchaser***" shall have the meaning set forth in Section 1.3.

9.77 "***Subsequent Units***" shall have the meaning set forth in Section 2.2.

9.78 "***Subsidiaries***" and "***Subsidiary***" shall mean, with respect to any Person (including the Company), any corporation, partnership, association or other business entity of which more than 50% of the issued and outstanding stock or equivalent thereof having ordinary voting power is owned or controlled by such Person, by one or more Subsidiaries or by such Person and one or more Subsidiaries of such Person.

9.79 "***Suppliers***" shall have the meaning set forth in Section 3.19.2.

9.80 "***Tax Returns***" shall mean any declaration, return, report, estimate, information return, schedule, statements or other document filed or required to be filed in connection with the calculation, assessment or collection of any Taxes or, when none is required to be filed with a taxing authority, the statement or other document issued by, a taxing authority.

9.81 "***Taxes***" shall mean (i) any tax, charge, fee, levy or other assessment including, without limitation, any net income, gross income, gross receipts, sales, use, *ad valorem*, transfer, franchise, profits, payroll, employment, social security, unemployment, excise, estimated, stamp, occupancy, occupation, property or other similar taxes, including any interest or penalties thereon, and additions to tax or additional amounts imposed by any federal, state, local or foreign Governmental or Regulatory Authority, domestic or foreign or (ii) any Liability for the payment of any taxes, interest, penalty, addition to tax or like additional amount resulting from the application of Treasury Regulation §1.1502-6 or comparable Requirement of Law.

9.82 "***Trademarks***" shall mean trademarks, service marks, trade names, corporate names, company names, business names, fictitious business names, trade styles, uniform resource locators (URLs), domain names, trade dress, any other names and locators associated with the Internet, other source of business identifiers, whether registered or unregistered and whether or not currently in use, and registrations, applications to register and all of the goodwill of the business related to the foregoing.

9.83 "***Transaction Documents***" shall mean this Agreement, the Certificate, the Investor Rights Agreement, the First Amended and Restated Stockholders Agreement, the Indemnification Agreements and all other documents, certificates and instruments executed and delivered at any Closing.

9.84 "***Units***" shall have the meaning set forth in the recitals to this Agreement and further defined in Section 1.1 herein.

[SIGNATURES ON FOLLOWING PAGES]

IN WITNESS WHEREOF, the parties hereto have executed this Unit Purchase Agreement as of the date set forth in the first paragraph hereof.

COMPANY:

ACTINIUM PHARMACEUTICALS, INC.
By:_____
Name: Jack V. Talley
Title: President and Chief Executive Officer

Address: 501 Fifth Avenue, 3rd Floor
New York, NY 10017

Tel: 646-459-4201
Fax: 1-800-559-6927
email: jtalley@actiniumpharmaceuticals.com

PURCHASERS:

The Purchasers set forth on Exhibit A to the Agreement have executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed the UNIT PURCHASE AGREEMENT in all respects and is bound to purchase the Units set forth in such Subscription Agreement and Exhibit A to the Agreement.

UNIT PURCHASE AGREEMENT

EXHIBIT A

SCHEDULE OF PURCHASERS

Initial Closing

Name of Purchaser	Initial Units	Common Stock	A Warrant Common Stock	B Warrant Common Stock	Total Purchase Price Amount
					$
					TOTAL: $

Subsequent Closing

Name of Subsequent Closing Purchaser	Subsequent Units	Common Stock	A Warrant Common Stock	B Warrant Common Stock	Total Purchase Price Amount
					TOTAL: $

FORM OF A WARRANT
EXHIBIT B-1

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR SATISFACTORY ASSURANCES TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED WITH RESPECT TO SUCH SALE, OFFER, PLEDGE OR HYPOTHECATION.

WARRANT TO PURCHASE COMMON STOCK

of
Actinium Pharmaceuticals, Inc.
Void after _____**, 2013**

This certifies that, for value received, _____, a _____, or its registered assigns ("Holder") is entitled, subject to the terms set forth below, to purchase from **Actinium Pharmaceuticals, Inc.** (the "Company"), a Delaware corporation, _____ **(_____)** shares of the Common Stock of the Company (the "Shares"), upon surrender hereof, at the principal office of the Company referred to below and simultaneous payment therefor in lawful money of the United States or otherwise as hereinafter provided, at the Exercise Price as set forth in Section 2 below. This Warrant is issued pursuant to the Unit Purchase Agreement dated as of _____, 2012, among the Company and certain Purchasers named therein (the "Purchase Agreement"). The number, character and Exercise Price of such shares of Common Stock (the "Common Stock") are subject to adjustment as provided below. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein.

Following the Pubco Transaction (as defined in the Purchase Agreement), references herein to the Shares of Common Stock shall be deemed to refer to shares of common stock of the Company's publicly traded successor in the Pubco Transaction ("Pubco"), and references herein to the Company shall be deemed to refer to Pubco.

1. **Term of Warrant**. Subject to the terms and conditions set forth herein, this Warrant shall be exercisable, in whole or in part, during the term commencing _____**, 2012** (the "Warrant Issue Date"), and ending at 5:00 p.m., Eastern Time on _____**, 2013** (the 120th day after the date of issuance), and shall be void thereafter.

2. **Exercise Price**. The Exercise Price per share of Common Stock at which this Warrant may be exercised shall be equal to **$0.55** per share as adjusted from time to time pursuant to Section 10 below (the 'Exercise Price").

3. **Exercise of Warrant**.

(a) The purchase rights represented by this Warrant are exercisable by the Holder in whole or in part at any time, or from time to time, by the surrender of this Warrant and the Notice of Exercise annexed hereto duly completed and executed on behalf of the Holder, at the office of the Company (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company), upon payment (i) in cash or by check acceptable to the Company, (ii) by cancellation by the Holder of then outstanding indebtedness of the Company to the Holder, or (iii) by a combination of (i) and (ii), of the purchase price of the shares to be purchased.

(b) This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above and payment of the Exercise Price, and the person entitled to receive the shares of Common Stock issuable upon such exercise shall be treated for all purposes as the holder of record of such shares as of the close of business on such date (the "Exercise Date"). As promptly as practicable on or after the Exercise Date, but in no event more than three (3) business days thereafter (the "Warrant Share Delivery Date"), the Company at its expense shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of shares issuable upon such exercise; provided, however, following the Pubco Transaction (as defined in the Purchase Agreement), this provision shall require certificates for Shares purchased hereunder to be transmitted by the transfer agent of Pubco to the Holder on the Exercise Date by crediting the account of the Holder's prime broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission ("DWAC") system. In the event that this Warrant is exercised in part, the Company at its expense will execute and deliver a new Warrant of like tenor exercisable for the number of shares for which this Warrant may then be exercised.

(c) Following the Pubco Transaction, in addition to any other rights available to the Holder, if Pubco fails to cause its transfer agent to deliver to the Holder a certificate or certificates representing the Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) Shares to deliver in satisfaction of a sale by the Holder of the Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then Pubco shall (1) pay in cash to the Holder the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Shares so purchased exceeds (y) the amount obtained by multiplying (A) the number of Shares that the Company was required to deliver to the Holder in connection with the exercise at issue, by (B) the price at which the sell order giving rise to such purchase obligation was executed, and (2) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would have been issued had Pubco timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (1) of the immediately preceding sentence Pubco shall be required to pay the Holder $1,000. The Holder shall provide Pubco written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of Pubco, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to Pubco's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

4. **No Fractional Shares or Scrip**. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

5. **Replacement of Warrant**. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of loss, theft, or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

6. **Rights of Shareholders**. Until Holder exercises this Warrant and the Company issues Holder shares of Common Stock purchasable upon the exercise hereof, as provided herein, Holder shall not be entitled to vote or receive dividends or be deemed the holder of Common Stock or any other securities of the Company that may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent or assert dissenter's rights with respect to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or otherwise.

7. **Transfer of Warrant**.

(a) Warrant Register. The Company will maintain a register (the "Warrant Register") containing the names and addresses of the Holder or Holders. Any Holder of this Warrant or any portion thereof may change his address as shown on the Warrant Register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be delivered or given by mail to such Holder as shown on the Warrant Register and at the address shown on the Warrant Register. Until this Warrant is transferred on the Warrant Register of the Company, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary.

(b) Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 7(a) above, issuing the Common Stock or other securities then issuable upon the exercise of this Warrant, exchanging this Warrant, replacing this Warrant, or any or all of the foregoing. Thereafter, any such registration, issuance, exchange, or replacement, as the case may be, shall be made at the office of such agent.

(c) Transferability and Non-negotiability of Warrant. This Warrant may not be transferred or assigned in whole or in part without compliance with the terms of this Warrant and all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, if such are requested by the Company).

(d) Compliance with Securities Laws.

(i) Holder understands that the Warrant and the Shares are characterized as "restricted securities" under the Securities Act of 1933, as amended (the "1993 Act") inasmuch as they are being acquired from the Company in a transaction not involving a public offering, and that under the 1933 Act and applicable regulations thereunder, such securities may be resold without registration under the 1933 Act only in certain limited circumstances. In this connection, Holder represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the 1933 Act. Holder understands that the Company is under no obligation to register any of the securities sold hereunder except as provided in Section 11 hereof. Holder understands that no public market now exists for any of the Warrants or the Shares and that it is uncertain whether a public market will ever exist for the Warrants or the Shares.

(ii) This Warrant and all certificates for the Shares issued upon exercise hereof shall be stamped or imprinted with a legend in substantially the following form (in addition to any legend required by state securities laws):

"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THE SHARES MAY NOT BE SOLD OR OFFERED FOR SALE IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SHARES UNDER SUCH ACT, (B) A "NO ACTION" LETTER OF THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH SALE OR OFFER OR (C) SATISFACTORY ASSURANCES TO THE CORPORATION THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR OFFER."

(e) Disposition of Holder's Rights**.**

(i) In no event will the Holder make a disposition of any of its rights to acquire Shares under this Warrant and/or of any of the Shares issuable upon exercise of any such rights unless and until (A) it shall have notified the Company of the proposed disposition, (B) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Holder) satisfactory to the Company and its counsel to the effect that (1) appropriate action necessary for compliance with the 1933 Act has been taken, or (2) an exemption from the registration requirements of the 1933 Act is available, and (C) if the disposition involves the sale of such rights or such Shares issuable upon exercise of such rights, it shall have offered to the Company, pursuant to Section 7(f) hereunder, such rights to acquire Shares or Shares issuable and upon exercise of such rights, as the case may be.

(ii) The restrictions imposed under this Section 7(e) shall terminate as to any of the Shares when (A) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (B) such security may be sold without registration in compliance with Rule 144 under the 1933 Act, or (C) a letter shall have been issued to the Holder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Holder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Holder or holder of Shares then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such Shares not bearing any restrictive legend.

(f) Company's Right of First Refusal . Subject to the foregoing, each time Holder proposes to sell any rights to purchase Shares hereunder or any of the Shares issuable upon exercise of such rights (the "Offered Shares"), Holder shall deliver a notice (a "Notice") to the Company stating, (A) its bona fide intention to sell such Offered Shares, (B) the number of such Offered Shares being offered, and (C) the price and terms, if any, upon which it proposes to offer such Offered Shares. Within twenty (20) days after receipt of the Notice (the "Notice Period"), the Company may elect by written notice to purchase or obtain, at the price and on the terms specified in the Notice, the number of Offered Shares as specified in the Notice, subject to applicable law with respect to issuer redemptions of securities. If the Company does not elect to purchase all of the Offered Shares, the Holder may, during the ninety (90) day period following the expiration of the Notice Period, offer the remaining unsubscribed portion of such Offered Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Holder does not enter into an agreement for the sale of the Offered Shares within such period, or if such agreement is not consummated within sixty (60) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Offered Shares shall not be offered unless first reoffered to the Company in accordance herewith. Notwithstanding anything herein to the contrary, this provision shall become null and void and of no further force or effect immediately upon consummation of the Pubco Transaction.

(g) Market Stand-Off.

(i) In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Company's initial public offering, Holder shall not sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or otherwise agree to engage in any of the foregoing transactions with respect to, any shares of Common Stock to be issued upon exercise hereof, without the prior written consent of the Company or its lead managing underwriter(s). Such restriction (the "Market Stand-Off") shall be in effect for such period of time from and after the effective date of the final prospectus for the offering as may be requested by the Company or such underwriter(s). In no event, however, shall such period exceed one hundred eighty (180) days, and the Market Stand-Off shall in all events terminate two (2) years after the effective date of the Company's initial public offering.

(ii) Holder shall be subject to the Market Stand-Off only if the officers and directors of the Company are also subject to similar restrictions.

(iii) Any new, substituted or additional securities which are by reason of any recapitalization or reorganization of the Company distributed with respect to the shares of Common Stock to be issued upon exercise hereof shall be immediately subject to the Market standoff, to the same extent the shares of Common Stock to be issued upon exercise hereof are at such time covered by such provisions.

(iv) In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the shares of Common Stock to be issued upon exercise hereof until the end of the applicable stand-off period.

(h) Any entity to whom Holder transfers any right to purchase the Shares pursuant to this Warrant or any of the Shares issuable upon the exercise of such right shall become a "Holder" for purposes of this Section 7.

8. **Reservation of Stock**. The Company covenants that during the term this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of this Warrant and, from time to time, will take all steps necessary to amend its Fifth Amended and Restated Certificate of Incorporation (the "Certificate") as the same may be amended from time to time to provide sufficient reserves of shares of Common Stock issuable upon exercise of the Warrant. The Company further covenants that all shares that may be issued upon the exercise of rights represented by this Warrant, upon exercise of the rights represented by this Warrant and payment of the Exercise Price, all as set forth herein, will be free from all taxes, liens, and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously or otherwise specified herein). The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

9. **Amendments**.

(a) This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the holder(s) of greater than 50% of unexercised Shares then issuable pursuant to all Warrants issued pursuant to the Purchase Agreement, provided that no part of Section 12 hereof (Placement Agent's Fees and Expenses) may be amended or waived without the written consent of the Placement Agent (as defined in the Purchase Agreement), in addition to the foregoing. Any amendment, modification or waiver effected in accordance with this Section 9 shall be binding upon each future holder of the Warrant and the Company.

(b) No waivers of or exceptions to any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

10. **Adjustments**. The Exercise Price and the number of shares purchasable hereunder are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall, by reclassification of securities or otherwise, change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 10.

(b) Dividend, Split, Subdivision or Combination of Shares. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall declare a dividend or make a distribution on the outstanding Common Stock payable in shares of its capital stock, or split, subdivide or combine the securities as to which purchase rights under this Warrant exist into a different number of securities of the same class, the Exercise Price for such securities shall be proportionately decreased in the case of a dividend, split or subdivision or proportionately increased in the case of a combination.

(c) Anti-Dilution.

i. Definitions. For the purposes of this Section 10(c), the following definitions shall apply:

1. "*Applicable Per Share Stated Value of the Series E Preferred Stock*" means $0.261 per share, subject to appropriate and proportionate adjustment for stock dividends payable in shares of , stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to the Series E Preferred Stock (as defined in the Purchase Agreement).

2. "*Common Stock Equivalent*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

3. "*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

4. "*Qualified Initial Public Offering*" means the closing of the Company's initial direct public offering or underwritten public offering on a firm commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company (a) in which (i) the Company actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Company is listed on a national securities exchange.

ii. Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. For so long as there are any Warrants outstanding, if and whenever at any time and from time to time after the Warrant Issue Date, as applicable, the Company shall issue, or is, in accordance with Sections 10(c)(ii)(1) through 10(c)(ii)(7) of this Section 10, deemed to have issued, any shares of Common Stock for no consideration or a consideration per share less than the Exercise Price, as applicable, then, forthwith upon such issue or sale, the Warrants shall be subject to a proportional adjustment determined by multiplying such Warrant Exercise Price by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Company for the total number of such additional shares of Common Stock so issued or deemed to be issued would purchase at the Warrant Exercise Price, as applicable, in effect immediately prior to such issuance; and

N(2) = the number of such additional shares of Common Stock so issued or deemed to be issued.

For purposes of this Section 10(c)(ii), the following Sections 10(c)(ii)(1) to 10(c)(ii)(5) shall be applicable:

1. Consideration for Shares. For purposes of this Section 10(c)(ii), the consideration received by the Company for the issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

   A. insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Company therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

   B. insofar as such consideration consists of property other than cash, the value of such property received by the Company shall be deemed to be the fair value of such property at the time of such issuance as determined in good faith by the Board, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith;

   C. insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock issued or deemed issued; and

   D. in the event that Common Stock or Common Stock Equivalents shall be issued in connection with the issue of other securities of the Company, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board.

2. Issuance of Common Stock Equivalents. The issuance of any Common Stock Equivalents shall be deemed an issuance of the maximum number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents.

3. Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Company for any shares of Common Stock issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Company for the issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Company upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

4. Record Date. In case the Company shall establish a record date with respect to the holders of any class or series of the Company's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the issuance of the shares of Common Stock deemed to have been issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5. Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section 10(c)(ii) shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

   A. the issuance of shares of Common Stock (or options to purchase or

acquire shares of Common Stock) to employees, consultants, officers or directors of the Company or any Affiliate or Subsidiary of the Company pursuant to a stock option plan or restricted stock plan or arrangement, which issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

B. the issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

C. the issuance of shares of Common Stock in a Qualified Initial Public Offering or pursuant to the Pubco Transaction;

D. the issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates (as defined in the Purchase Agreement) and are approved by a majority of the entire Board;

E. the issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and that are approved a majority of the entire Board;

F. the issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Company's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board; or

G. the issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Company or any of its Affiliates to investment bankers, placement agents or advisors in connection with the issuance of Series E Preferred Stock and the Units (as defined in the Purchase Agreement).

(d) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 10, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request, at any time, of any such holder, furnish or cause to be furnished to such holder a like certificate setting forth: (i) such adjustments and readjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

11. **Registration Rights.** The shares of Common Stock issuable upon exercise of this Warrant shall have the registration rights set forth in the 2012 Unit Investor Rights Agreement attached as an exhibit to the Purchase Agreement.

12. **Placement Agent's Fees and Expenses**. Holder understands that, upon any exercise of this Warrant, the Placement Agent (as defined in the Purchase Agreement) shall be entitled to receive a commission equal to 10% and a non-accountable expense allowance equal to 2% of the aggregate Exercise Price paid by Holder upon such exercise. The Company shall direct the Holder to make such commission and expense payment directly to the Placement Agent and the Holder shall comply with such direction.

13. **Reclassification; Reorganization; Merger.**

In case of any capital reorganization, other than in the cases referred to in Sections 10(a) and 10(b) hereof, or the consolidation or merger of the Company with or into another corporation, including without limitation, the Pubco Transaction (other than a merger or consolidation in which the Company is the continuing corporation and which does not result in any reclassification of the outstanding shares of Common Stock or the conversion of such outstanding shares of Common Stock into shares of other stock or other securities or property), or in the case of any sale, lease, or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety (such actions being hereinafter collectively referred to as "Reorganizations"), there shall thereafter be deliverable upon exercise of this Warrant (in lieu of the number of Shares theretofore deliverable) the number of shares of stock or other securities or property to which a holder of the respective number of Shares which would otherwise have been deliverable upon the exercise of this Warrant would have been entitled upon such Reorganization if this Warrant had been exercised in full immediately prior to such Reorganization. In case of any Reorganization, appropriate adjustment, as determined in good faith by the Board of Directors of the Company, shall be made in the application of the provisions herein set forth with respect to the rights and interests of the Holder so that the provisions set forth herein shall thereafter be applicable, as nearly as possible, in relation to any shares or other property thereafter deliverable upon exercise of this Warrant. Any such adjustment shall be made by, and set forth in, a supplemental agreement between the Company, or any successor thereto (including, without limitation, Pubco) and the Holder, with respect to this Warrant, and shall for all purposes hereof conclusively be deemed to be an appropriate adjustment. The Company shall not effect any such Reorganization unless, upon or prior to the consummation thereof, the successor corporation, or, if the Company shall be the surviving corporation in any such Reorganization and is not the issuer of the shares of stock or other securities or property to be delivered to holders of shares of the Common Stock outstanding at the effective time thereof then such issuer (including, without limitation, Pubco), shall assume by written instrument the obligation to deliver to the Holder such shares of stock, securities, cash, or other property as such Holder shall be entitled to purchase in accordance with the foregoing provisions. In the event of sale, lease, or conveyance or other transfer of all or substantially all of the assets of the Company as part of a plan for liquidation of the Company, all rights to exercise this Warrant shall terminate thirty (30) days after the Company gives written notice to the Holder that such sale or conveyance or other transfer has been consummated.

The above provisions of this Section 12 shall similarly apply to successive reclassifications and changes of shares of Common Stock and to successive consolidations, mergers, sales, leases, or conveyances.

14. **Notice of Certain Events.**

In case at any time the Company shall propose:

(a) to pay any dividend or make any distribution on shares of Common Stock in shares of Common Stock or make any other distribution (other than regularly scheduled cash dividends which are not in a greater amount per share than the most recent such cash dividend) to all holders of Common Stock; or

(b) to issue any rights, warrants, or other securities to all holders of Common Stock entitling them to purchase any additional shares of Common Stock or any other rights, warrants, or other securities; or

(c) to effect any reclassification or change of outstanding shares of Common Stock or any consolidation, merger, sale, lease, or conveyance of property, as described in Section 12 (including, without limitation, the Pubco Transaction); or

(d) to effect any liquidation, dissolution, or winding-up of the Company; or

(e) to take any other action which would cause an adjustment to the Exercise Price;

then, and in any one or more of such cases, the Company shall give written notice thereof by registered mail, postage prepaid, to the Holder at the Holder's address as it shall appear in the Warrant Register, mailed at least fifteen (15) days prior to: (1) the date as of which the holders of record of shares of Common Stock to be entitled to receive any such dividend, distribution, rights, warrants, or other securities are to be determined, (2) the date on which any such reclassification, change of outstanding shares of Common Stock, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up is expected to become effective and the date as of which it is expected that holders of record of shares of Common Stock shall be entitled to exchange their shares for securities or other property, if any, deliverable upon such reclassification, change of outstanding shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up, or (3) the date of such action which would require an adjustment to the Exercise Price.

15. **Miscellaneous**.

(a) Additional Undertaking. The Holder hereby agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on either the Holder or the shares of Common Stock issued upon exercise hereof pursuant to the provisions of this Warrant.

(b) Governing Law; Venue. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware without resort to that State's conflict-of-laws rules. Venue for any legal action hereunder shall be in the state or federal courts located in the Borough of Manhattan, New York, New York.

(c) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

(d) Successors and Assigns. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Holder, the Holder's permitted assigns and the legal representatives, heirs and legatees of the Holder's estate, whether or not any such person shall have become a party to this Warrant and have agreed in writing to join herein and be bound by the terms hereof.

(e) Notices. All notices, requests, demands and other communications given or made in accordance with the provisions of this Warrant shall be addressed (i) if to Holder, at such Holder's address, fax number or email address, as furnished to the Company on the signature page to the Purchase Agreement or as otherwise furnished to the Company by the Holder in writing, or (ii) if to the Company, to the attention of the President at such address, fax number or email address furnished to the Holder on the signature page to the Purchase Agreement or as otherwise furnished by the Company in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

[Signatures appear on the following page]

IN WITNESS WHEREOF, **Actinium Pharmaceuticals, Inc.** has caused this Warrant to be executed by its officer thereunto duly authorized.

Dated as of _____**, 2012**.

ACTINIUM PHARMACEUTICALS, INC.

By:
Jack V. Talley
President and Chief Executive Officer

HOLDER

The Holder has executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed this Warrant in all respects and is bound to purchase the terms thereof as set forth in the Subscription Agreement.

NOTICE OF EXERCISE

To: **Actinium Pharmaceuticals, Inc.**

(1) The undersigned hereby elects to purchase _____ shares of Common Stock of **Actinium Pharmaceuticals, Inc.**, pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price for such shares in full.

(2) In exercising this Warrant, the undersigned hereby confirms and acknowledges that the shares of Common Stock have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), and are restricted securities under the 1933 Act and that the undersigned will not offer, sell, or otherwise dispose of any such shares of Common Stock except under circumstances that will not result in a violation of the 1933 Act or any state securities laws.

(3) Please issue a certificate or certificates representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name
Name

(4) Please issue a new Warrant for the unexercised portion of the attached Warrant in the name of the undersigned or in such other name as is specified below:

Name
Name

Date: Signature:

FORM OF B WARRANT

EXHIBIT B-2

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR SATISFACTORY ASSURANCES TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED WITH RESPECT TO SUCH SALE, OFFER, PLEDGE OR HYPOTHECATION.

WARRANT TO PURCHASE COMMON STOCK
of
Actinium Pharmaceuticals, Inc.
Void after _____, 2017

This certifies that, for value received, **_____**, a _____, or its registered assigns ("Holder") is entitled, subject to the terms set forth below, to purchase from **Actinium Pharmaceuticals, Inc. (the "Company"), a Delaware corporation, _____ (_____)** shares of the Common Stock of the Company (the "Shares"), upon surrender hereof, at the principal office of the Company referred to below and simultaneous payment therefor in lawful money of the United States or otherwise as hereinafter provided, at the Exercise Price as set forth in Section 2 below. This Warrant is issued pursuant to the Unit Purchase Agreement dated as of _____, 2012, among the Company and certain Purchasers named therein (the "Purchase Agreement"). The number, character and Exercise Price of such shares of Common Stock (the "Common Stock") are subject to adjustment as provided below. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein.

Following the Pubco Transaction (as defined in the Purchase Agreement), references herein to the Shares or Common Stock shall be deemed to refer to shares of common stock of the Company's publicly traded successor in the Pubco transaction ("Pubco"), and references herein to the Company shall be deemed to refer to Pubco.

1. **Term of Warrant**. Subject to the terms and conditions set forth herein, this Warrant shall be exercisable, in whole or in part, during the term commencing **_____, 2012** (the "Warrant Issue Date"), and ending at 5:00 p.m., Eastern Time on the fifth anniversary of the final Subsequent Closing (as defined in the Purchase Agreement), and shall be void thereafter.

2. **Exercise Price**. The Exercise Price per share of Common Stock at which this Warrant may be exercised shall be equal to **$0.825** per share as adjusted from time to time pursuant to Section 10 below (the "Exercise Price").

3. **Exercise of Warrant**.

(a) The purchase rights represented by this Warrant are exercisable by the Holder in whole or in part at any time, or from time to time, by the surrender of this Warrant and the Notice of Exercise annexed hereto duly completed and executed on behalf of the Holder, at the office of the Company (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company), upon payment (i) in cash or by check acceptable to the Company, (ii) by cancellation by the Holder of then outstanding indebtedness of the Company to the Holder, (iii) by a combination of (i) and (ii), of the purchase price of the shares to be purchased or (iv) by cashless exercise as set forth in Section 3(c), below, of the purchase price of the shares to be purchased, except upon a call by the Company.

(b) This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above and payment of the Exercise Price if exercised for cash, and the person entitled to receive the shares of Common Stock issuable upon such exercise shall be treated for all purposes as the holder of record of such shares as of the close of business on such date (the "Exercise Date"). As promptly as practicable on or after the Exercise Date, but in no event more than three (3) business days thereafter (the "Warrant Share Delivery Date"), the Company at its expense shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of shares issuable upon such exercise; provided, however, following the Pubco Transaction (as defined in the Purchase Agreement), this provision shall require certificates for Shares purchased hereunder to be transmitted by the transfer agent of Pubco to the Holder on the Exercise Date by crediting the account of the Holder's prime broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission ("DWAC") system. In the event that this Warrant is exercised in part, the Company at its expense will execute and deliver a new Warrant of like tenor exercisable for the number of shares for which this Warrant may then be exercised.

(c) The Holder, at its option, may exercise this Warrant in a cashless exercise transaction pursuant to this subsection (c) (a "Cashless Exercise"). In order to effect a Cashless Exercise, the Holder shall surrender this Warrant at the principal office of the Company together with an Exercise Form, completed and executed, indicating Holder's election to effect a Cashless Exercise, in which event the Company shall issue Holder a number of shares of Common Stock computed using the following formula:

$$X = Y (A-B)/A$$

where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock for which this Warrant is being Exercised.

A = the Market Price of one (1) share of Common Stock (for purposes of this Section 3(c), where "Market Price," means the Volume Weighted Average Price (as defined herein) of one (1) share of Common Stock during the ten (10) consecutive Trading Day period immediately preceding the Exercise Date.

B = the Exercise Price.

As used herein, the "Volume Weighted Average Price" for any security as of any date means the volume weighted average sale price on The NASDAQ Global Market ("NASDAQ") as reported by, or based upon data reported by, Bloomberg Financial Markets or an equivalent, reliable reporting service mutually acceptable to and hereafter designated by holders of a majority in interest of the Warrants and the Company ("Bloomberg") or, if NASDAQ is not the principal trading market for such security, the volume weighted average sale price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or, if no volume weighted average sale price is reported for such security, then the last closing trade price of such security as reported by Bloomberg, or, if no last closing trade price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security that are listed in the over the counter market by the Financial Industry Regulatory Authority, Inc. or in the "pink sheets" by the Pink OTC Market, Inc. If the Volume Weighted Average Price cannot be calculated for such security on such date in the manner provided above, the volume weighted average price shall be the fair market value as determined in good faith by the Company's Board of Directors. "Trading Day" shall mean any day on which the Common Stock is traded for any period on NASDAQ, or on the principal securities exchange or other securities market on which the Common Stock is then being traded.

For purposes of Rule 144 and sub-section (d)(3)(ii) thereof, it is intended, understood and acknowledged that the Common Stock issued upon Exercise of this Warrant in a Cashless Exercise transaction shall be deemed to have been acquired at the time this Warrant was issued. Moreover, it is intended, understood and acknowledged that the holding period for the Common Stock issued upon Exercise of this Warrant in a Cashless Exercise transaction shall be deemed to have commenced on the date this Warrant was issued.

(d) In the case of a dispute as to the determination of the closing price or the Volume Weighted Average Price of the Company's Common Stock or the arithmetic calculation of the Exercise Price or Market Price, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within four (4) business days of receipt, or deemed receipt, of the Exercise Notice, or other event giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation within two (2) business days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) business days submit via facsimile (i) the disputed determination of the closing price or the Volume Weighted Average Price of the Company's Common Stock to an independent, reputable investment bank selected by the Company and approved by the Holder, which approval shall not be unreasonably withheld or delayed or (ii) the disputed arithmetic calculation of the Exercise Price, Market Price to the Company's independent, outside accountant, or another accounting firm of national standing selected by the Company. The Company shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than the later of (i) five (5) business days from the time it receives the disputed determinations or calculations or (ii) five (5) business days from the selection of the investment bank and accounting firm, as applicable. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

(e) Following the Pubco Transaction, in addition to any other rights available to the Holder, if Pubco fails to cause its transfer agent to deliver to the Holder a certificate or certificates representing the Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) Shares to deliver in satisfaction of a sale by the Holder of the Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then Pubco shall (1) pay in cash to the Holder the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Shares so purchased exceeds (y) the amount obtained by multiplying (A) the number of Shares that the Company was required to deliver to the Holder in connection with the exercise at issue, by (B) the price at which the sell order giving rise to such purchase obligation was executed, and (2) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would have been issued had Pubco timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (1) of the immediately preceding sentence Pubco shall be required to pay the Holder $1,000. The Holder shall provide Pubco written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of Pubco, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to Pubco's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

4. **No Fractional Shares or Scrip**. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

5. **Replacement of Warrant**. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of loss, theft, or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

6. **Rights of Shareholders**. Until Holder exercises this Warrant and the Company issues Holder shares of Common Stock purchasable upon the exercise hereof, as provided herein, Holder shall not be entitled to vote or receive dividends or be deemed the holder of Common Stock or any other securities of the Company that may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent or assert dissenter's rights with respect to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or otherwise.

7. **Transfer of Warrant**.

(a) Warrant Register. The Company will maintain a register (the "Warrant Register") containing the names and addresses of the Holder or Holders. Any Holder of this Warrant or any portion thereof may change his address as shown on the Warrant Register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be delivered or given by mail to such Holder as shown on the Warrant Register and at the address shown on the Warrant Register. Until this Warrant is transferred on the Warrant Register of the Company, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary.

(b) Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 7(a) above, issuing the Common Stock or other securities then issuable upon the exercise of this Warrant, exchanging this Warrant, replacing this Warrant, or any or all of the foregoing. Thereafter, any such registration, issuance, exchange, or replacement, as the case may be, shall be made at the office of such agent.

(c) Transferability and Non-negotiability of Warrant. This Warrant may not be transferred or assigned in whole or in part without compliance with the terms of this Warrant and all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, if such are requested by the Company).

(d) Compliance with Securities Laws.

(i) Holder understands that the Warrant and the Shares are characterized as "restricted securities" under the 1933 Act inasmuch as they are being acquired from the Company in a transaction not involving a public offering, and that under the Securities Act of 1933, as amended (the "1933 Act") and applicable regulations thereunder, such securities may be resold without registration under the 1933 Act only in certain limited circumstances. In this connection, Holder represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the 1933 Act. Holder understands that the Company is under no obligation to register any of the securities sold hereunder except as provided in Section 11 hereof. Holder understands that no public market now exists for any of the Warrants or the Shares and that it is uncertain whether a public market will ever exist for the Warrants or the Shares.

(ii) This Warrant and all certificates for the Shares issued upon exercise hereof shall be stamped or imprinted with a legend in substantially the following form (in addition to any legend required by state securities laws):

"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THE SHARES MAY NOT BE SOLD OR OFFERED FOR SALE IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SHARES UNDER SUCH ACT, (B) A "NO ACTION" LETTER OF THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH SALE OR OFFER OR (C) SATISFACTORY ASSURANCES TO THE CORPORATION THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR OFFER."

(e) Disposition of Holder's Rights**.**

(i) In no event will the Holder make a disposition of any of its rights to acquire Shares under this Warrant and/or of any of the Shares issuable upon exercise of any such rights unless and until (A) it shall have notified the Company of the proposed disposition, (B) if requested by the Company, it shall have furnished the Company with an opinion of counsel (which counsel may either be inside or outside counsel to the Holder) satisfactory to the Company and its counsel to the effect that (1) appropriate action necessary for compliance with the 1933 Act has been taken, or (2) an exemption from the registration requirements of the 1933 Act is available, and (C) if the disposition involves the sale of such rights or such Shares issuable upon exercise of such rights, it shall have offered to the Company, pursuant to Section 7(f) hereunder, such rights to acquire Shares or Shares issuable and upon exercise of such rights, as the case may be.

(ii) The restrictions imposed under this Section 7(e) shall terminate as to any of the Shares when (A) such security shall have been effectively registered under the 1933 Act and sold by the holder thereof in accordance with such registration or (B) such security may be sold without registration in compliance with Rule 144 under the 1933 Act, or (C) a letter shall have been issued to the Holder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Holder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the 1933 Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required. Whenever the restrictions imposed hereunder shall terminate, as hereinabove provided, the Holder or holder of Shares then outstanding as to which such restrictions have terminated shall be entitled to receive from the Company, without expense to such holder, one or more new certificates for the Warrant or for such Shares not bearing any restrictive legend.

(f) Company's Right of First Refusal. Subject to the foregoing, each time Holder proposes to sell any rights to purchase Shares hereunder or any of the Shares issuable upon exercise of such rights (the "Offered Shares"), Holder shall deliver a notice (a "Notice") to the Company stating, (A) its bona fide intention to sell such Offered Shares, (B) the number of such Offered Shares being offered, and (C) the price and terms, if any, upon which it proposes to offer such Offered Shares. Within twenty (20) days after receipt of the Notice (the "Notice Period"), the Company may elect by written notice to purchase or obtain, at the price and on the terms specified in the Notice, the number of Offered Shares as specified in the Notice, subject to applicable law with respect to issuer redemptions of securities. If the Company does not elect to purchase all of the Offered Shares, the Holder may, during the ninety (90) day period following the expiration of the Notice Period, offer the remaining unsubscribed portion of such Offered Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Holder does not enter into an agreement for the sale of the Offered Shares within such period, or if such agreement is not consummated within sixty (60) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Offered Shares shall not be offered unless first reoffered to the Company in accordance herewith. Notwithstanding anything herein to the contrary, this provision shall become null and void and of no further force or effect immediately upon consummation of the Pubco Transaction.

(g) Market Stand-Off.

(i) In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Company's initial public offering, Holder shall not sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or otherwise agree to engage in any of the foregoing transactions with respect to, any shares of Common Stock to be issued upon exercise hereof, without the prior written consent of the Company or its lead managing underwriter(s). Such restriction (the "Market Stand-Off") shall be in effect for such period of time from and after the effective date of the final prospectus for the offering as may be requested by the Company or such underwriter(s). In no event, however, shall such period exceed one hundred eighty (180) days, and the Market Stand-Off shall in all events terminate two (2) years after the effective date of the Company's initial public offering.

(ii) Holder shall be subject to the Market Stand-Off only if the officers and directors of the Company are also subject to similar restrictions.

(iii) Any new, substituted or additional securities which are by reason of any recapitalization or reorganization of the Company distributed with respect to the shares of Common Stock to be issued upon exercise hereof shall be immediately subject to the Market standoff, to the same extent the shares of Common Stock to be issued upon exercise hereof are at such time covered by such provisions.

(iv) In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the shares of Common Stock to be issued upon exercise hereof until the end of the applicable stand-off period.

(h) Any entity to whom Holder transfers any right to purchase the Shares pursuant to this Warrant or any of the Shares issuable upon the exercise of such right shall become a "Holder" for purposes of this Section 7.

8. **Reservation of Stock**. The Company covenants that during the term this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of Common Stock upon the exercise of this Warrant and, from time to time, will take all steps necessary to amend its Fifth Amended and Restated Certificate of Incorporation (the "Certificate") as the same may be amended from time to time to provide sufficient reserves of shares of Common Stock issuable upon exercise of the Warrant. The Company further covenants that all shares that may be issued upon the exercise of rights represented by this Warrant, upon exercise of the rights represented by this Warrant and payment of the Exercise Price, all as set forth herein, will be free from all taxes, liens, and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously or otherwise specified herein). The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

9. **Amendments**.

(a) This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the holder(s) of greater than 50% of unexercised Shares then issuable pursuant to all Warrants issued pursuant to the Purchase Agreement, provided that no part of Section 12 hereof (Right to Call) or Section 15(f) hereof (Placement Agent's Fees and Expenses) may be amended or waived without the written consent of the Placement Agent (as defined in the Purchase Agreement), in addition to the foregoing. With respect to a proposed modification, amendment or waiver of Section 12 only, if the Placement Agent does not object to such modification, amendment or waiver within 10 business days following such date when the Company has provided the Placement Agent with the proposed form of amendment, modification or waiver, the consent of the Placement Agent will be deemed to have been given. Any amendment, modification or waiver effected in accordance with this Section 9 shall be binding upon each future holder of the Warrant and the Company.

(b) No waivers of or exceptions to any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

10. **Adjustments**. The Exercise Price and the number of shares purchasable hereunder are subject to adjustment from time to time as follows:

(a) Reclassification, etc. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall, by reclassification of securities or otherwise, change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change and the Exercise Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 10.

(b) Dividend, Split, Subdivision or Combination of Shares. If the Company at any time while this Warrant, or any portion thereof, remains outstanding and unexpired shall declare a dividend or make a distribution on the outstanding Common Stock payable in shares of its capital stock, or split, subdivide or combine the securities as to which purchase rights under this Warrant exist into a different number of securities of the same class, the Exercise Price for such securities shall be proportionately decreased in the case of a dividend, split or subdivision or proportionately increased in the case of a combination.

(c) Anti-Dilution**.**

i. Definitions. For the purposes of this Section 10(c), the following definitions shall apply:

1. "*Applicable Per Share Stated Value of the Series E Preferred Stock*" means $0.261 per share, subject to appropriate and proportionate adjustment for stock dividends payable in shares of , stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to the Series E Preferred Stock (as defined in the Purchase Agreement).

2. "*Common Stock Equivalent*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

3. "*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

4. "*Qualified Initial Public Offering*" means the closing of the Company's initial direct public offering or underwritten public offering on a firm commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company (a) in which (i) the Company actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Company is listed on a national securities exchange.

ii. Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. For so long as there are any Warrants outstanding, if and whenever at any time and from time to time after the Warrant Issue Date, as applicable, the Company shall issue, or is, in accordance with Sections 10(c)(ii)(1) through 10(c)(ii)(7) of this Section 10, deemed to have issued, any shares of Common Stock for no consideration or a consideration per

share less than the Exercise Price, as applicable, then, forthwith upon such issue or sale, the Warrants shall be subject to a proportional adjustment determined by multiplying such Warrant Exercise Price by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Company for the total number of such additional shares of Common Stock so issued or deemed to be issued would purchase at the Warrant Exercise Price, as applicable, in effect immediately prior to such issuance; and

N(2) = the number of such additional shares of Common Stock so issued or deemed to be issued.

For purposes of this Section 10(c)(ii), the following Sections 10(c)(ii)(1) to 10(c)(ii)(5) shall be applicable:

6. Consideration for Shares. For purposes of this Section 10(c)(ii), the consideration received by the Company for the issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

   A. insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Company therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

   B. insofar as such consideration consists of property other than cash, the value of such property received by the Company shall be deemed to be the fair value of such property at the time of such issuance as determined in good faith by the Board, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith;

   C. insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock issued or deemed issued; and

   D. in the event that Common Stock or Common Stock Equivalents shall be issued in connection with the issue of other securities of the Company, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board.

7. Issuance of Common Stock Equivalents. The issuance of any Common Stock Equivalents shall be deemed an issuance of the maximum number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents.

8. Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Company for any shares of Common Stock issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Company for the issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Company upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

9. Record Date. In case the Company shall establish a record date with respect to the holders of any class or series of the Company's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the issuance of the shares of Common Stock deemed to have been issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

10. Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section 10(c)(ii) shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

A. the issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) to employees, consultants, officers or directors of the Company or any Affiliate or Subsidiary of the Company pursuant to a stock option plan or restricted stock plan or arrangement, which issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

B. the issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

C. the issuance of shares of Common Stock in a Qualified Initial Public Offering or pursuant to the Pubco Transaction;

D. the issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates (as defined in the Purchase Agreement) and are approved by a majority of the entire Board;

E. the issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and that are approved a majority of the entire Board;

F. the issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Company's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Company or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board; or

G. the issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Company or any of its Affiliates to investment bankers, placement agents or advisors in connection with the issuance of Series E Preferred Stock and the Units (as defined in the Purchase Agreement).

(d) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 10, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request, at any time, of any such holder, furnish or cause to be furnished to such holder a like certificate setting forth: (i) such adjustments and readjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

11. **Registration Rights.** The shares of Common Stock issuable upon exercise of this Warrant shall have the registration rights set forth in the 2012 Unit Investor Rights Agreement attached as an exhibit to the Purchase Agreement.

12. **Right to Call**. Following the Pubco Transaction, Pubco may call this Warrant for redemption upon written notice to all Purchasers of Units (each as defined in the Purchase Agreement) at any time the closing price of the Common Stock exceeds $1.50 (as adjusted pursuant to Section 10) for 20 consecutive trading days, as reported by Bloomberg, provided at such time there is an effective registration statement covering the resale of the Shares. In the 60 business days following the date the redemption notice is deemed given in accordance with Section 15(e) hereof (the "Exercise Period"), investors may choose to exercise this Warrant or a portion of the Warrant by paying the then applicable Exercise Price per share for every Share exercised. Any Shares not exercised by 5:00 pm Eastern Time on the last day of the Exercise Period will be redeemed by the Company at $0.001 per share. Holder understands that the Placement Agent (as defined in the Purchase Agreement) shall be entitled to receive a warrant solicitation fee equal to 5% of the aggregate Exercise Price paid by Holder upon such exercise following a call for redemption by the Company. The Company shall direct the Holder to make such solicitation fee payment directly to the Placement Agent and the Holder shall comply with such direction.

13. **Reclassification; Reorganization; Merger.**

In case of any capital reorganization, other than in the cases referred to in Sections 10(a) and 10(b) hereof, or the consolidation or merger of the Company with or into another corporation, including without limitation, the Pubco Transaction (other than a merger or consolidation in which the Company is the continuing corporation and which does not result in any reclassification of the outstanding shares of Common Stock or the conversion of such outstanding shares of Common Stock into shares of other stock or other securities or property), or in the case of any sale, lease, or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety (such actions being hereinafter collectively referred to as "Reorganizations"), there shall thereafter be deliverable upon exercise of this Warrant (in lieu of the number of Shares theretofore deliverable) the number of shares of stock or other securities or property to which a holder of the respective number of Shares which would otherwise have been deliverable upon the exercise of this Warrant would have been entitled upon such Reorganization if this Warrant had been exercised in full immediately prior to such Reorganization. In case of any Reorganization, appropriate adjustment, as determined in good faith by the Board of Directors of the Company, shall be made in the application of the provisions herein set forth with respect to the rights and interests of the Holder so that the provisions set forth herein shall thereafter be applicable, as nearly as possible, in relation to any shares or other property thereafter deliverable upon exercise of this Warrant. Any such adjustment shall be made by, and set forth in, a supplemental agreement between the Company, or any successor thereto (including, without limitation, Pubco) and the Holder, with respect to this Warrant, and shall for all purposes hereof conclusively be deemed to be an appropriate adjustment. The Company shall not effect any such Reorganization unless, upon or prior to the consummation thereof, the successor corporation, or, if the Company shall be the surviving corporation in any such Reorganization and is not the issuer of the shares of stock or other securities or property to be delivered to holders of shares of the Common Stock outstanding at the effective time thereof then such issuer (including, without limitation, Pubco), shall assume by written instrument the obligation to deliver to the Holder such shares of stock, securities, cash, or other property as such Holder shall be entitled to purchase in accordance with the foregoing provisions. In the event of sale, lease, or conveyance or other transfer of all or substantially all of the assets of the Company as part of a plan for liquidation of the Company, all rights to exercise this Warrant shall terminate thirty (30) days after the Company gives written notice to the Holder that such sale or conveyance or other transfer has been consummated.

The above provisions of this Section 13 shall similarly apply to successive reclassifications and changes of shares of Common Stock and to successive consolidations, mergers, sales, leases, or conveyances.

14. **Notice of Certain Events.**

In case at any time the Company shall propose:

(a) to pay any dividend or make any distribution on shares of Common Stock in shares of Common Stock or make any other distribution (other than regularly scheduled cash dividends which are not in a greater amount per share than the most recent such cash dividend) to all holders of Common Stock; or

(b) to issue any rights, warrants, or other securities to all holders of Common Stock entitling them to purchase any additional shares of Common Stock or any other rights, warrants, or other securities; or

(c) to effect any reclassification or change of outstanding shares of Common Stock or any consolidation, merger, sale, lease, or conveyance of property, as described in Section 13 (including, without limitation, the Pubco Transaction); or

(d) to effect any liquidation, dissolution, or winding-up of the Company; or

(e) to take any other action which would cause an adjustment to the Exercise Price;

then, and in any one or more of such cases, the Company shall give written notice thereof by registered mail, postage prepaid, to the Holder at the Holder's address as it shall appear in the Warrant Register, mailed at least fifteen (15) days prior to: (1) the date as of which the holders of record of shares of Common Stock to be entitled to receive any such dividend, distribution, rights, warrants, or other securities are to be determined, (2) the date on which any such reclassification, change of outstanding shares of Common Stock, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up is expected to become effective and the date as of which it is expected that holders of record of shares of Common Stock shall be entitled to exchange their shares for securities or other property, if any, deliverable upon such reclassification, change of outstanding shares, consolidation, merger, sale, lease, conveyance of property, liquidation, dissolution, or winding-up, or (3) the date of such action which would require an adjustment to the Exercise Price.

15 Miscellaneous.

(a) Additional Undertaking. The Holder hereby agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on either the Holder or the shares of Common Stock issued upon exercise hereof pursuant to the provisions of this Warrant.

(b) Governing Law; Venue. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware without resort to that State's conflict-of-laws rules. Venue for any legal action hereunder shall be in the state or federal courts located in the Borough of Manhattan, New York, New York.

(c) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

(d) Successors and Assigns. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Holder, the Holder's permitted assigns and the legal representatives, heirs and legatees of the Holder's estate, whether or not any such person shall have become a party to this Warrant and have agreed in writing to join herein and be bound by the terms hereof.

(e) Notices. All notices, requests, demands and other communications given or made in accordance with the provisions of this Warrant shall be addressed (i) if to Holder, at such Holder's address, fax number or email address, as furnished to the Company on the signature page to the Purchase Agreement or as otherwise furnished to the Company by the Holder in writing, or (ii) if to the Company, to the attention of the President at such address, fax number or email address furnished to the Holder on the signature page to the Purchase Agreement or as otherwise furnished by the Company in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

(f) Placement Agent's Fee and Expenses. Holder understands that, upon any exercise of this Warrant for cash within six months following the final Closing under the Purchase Agreement, the Placement Agent shall be entitled to receive a commission equal to 10% and a non-accountable expense allowance equal to 2% of the aggregate Exercise Price paid by Holder upon such exercise. The Company shall direct the Holder to make such commission and expense payment directly to the Placement Agent and the Holder shall comply with such direction.

[Signatures appear on the following page]

IN WITNESS WHEREOF, **Actinium Pharmaceuticals, Inc.** has caused this Warrant to be executed by its officer thereunto duly authorized.

Dated as of **_____, 2012**.

ACTINIUM PHARMACEUTICALS, INC.

By:
Jack V. Talley
President and Chief Executive Officer

HOLDER

The Holder has executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed this Warrant in all respects and is bound to purchase the terms thereof as set forth in the Subscription Agreement.

NOTICE OF EXERCISE

To: **Actinium Pharmaceuticals, Inc.**

(1) The undersigned hereby elects to purchase **_____ (_____)** shares of Common Stock of **Actinium Pharmaceuticals, Inc.**, pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price for such shares in full.

(2) Payment shall take the form of (check applicable box):

[ ] lawful money of the United States; or

[ ] the cancellation of such number of warrant Shares as is necessary, in accordance with the formula set forth in subsection 3(c), to exercise this Warrant with respect to the number of warrant Shares for which the Warrant is being exercised pursuant to the cashless exercise procedure set forth in subsection 3(c).

(3) In exercising this Warrant, the undersigned hereby confirms and acknowledges that the shares of Common Stock have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), and are restricted securities under the 1933 Act and that the undersigned will not offer, sell, or otherwise dispose of any such shares of Common Stock except under circumstances that will not result in a violation of the 1933 Act or any state securities laws.

(4) Please issue a certificate or certificates representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name

(5) Please issue a new Warrant for the unexercised portion of the attached Warrant in the name of the undersigned or in such other name as is specified below:

Name _

Name _

Date: Signature:

FORM OF FIFTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

EXHIBIT C

FIFTH RESTATED
CERTIFICATE OF INCORPORATION
OF
ACTINIUM PHARMACEUTICALS, INC.

ACTINIUM PHARMACEUTICALS, INC. (the "*Corporation*"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "*DGCL*"), hereby certifies as follows:

FIRST: The name of the Corporation is Actinium Pharmaceuticals, Inc. A Certificate of Incorporation of the Corporation originally was filed by the Corporation with the Secretary of State of Delaware on June 13, 2000, restated on June 6, 2001, further amended on June 29, 2004, further amended and restated on October 24, 2006, further amended and restated on March 28, 2008, and further amended and restated on October 3, 2011 (collectively, the "*Certificate of Incorporation*").

SECOND: This Fifth Restated Certificate of Incorporation restates and integrates and amends the Certificate of Incorporation of the Corporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the DGCL, and was approved at the Corporation's annual meeting by vote of the stockholders of the Corporation, notice of such meeting given in accordance with the provisions of Section 222 of the DGCL.

THIRD: The text of the Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

The name of the corporation is Actinium Pharmaceuticals, Inc. (the "*Corporation*").

ARTICLE II

The address of the Corporation's registered office is 1209 Orange Street in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

A. Authorization. The aggregate number of shares of all classes of stock which the Corporation shall have authority to issue is 325,000,000, consisting of: (i) 283,463,176shares of common stock, par value $0.01 per share (the "*Common Stock*"), and (ii) 41,536,824 shares of preferred stock, par value $0.01 per share (the "*Preferred Stock*"). The Preferred Stock authorized by this Certificate of Incorporation may be issued from time to time in one or more series. The Board of Directors is authorized, subject to the affirmative vote or written approval of the Applicable Percentage of the Series E Preferred Stock outstanding and the limitations prescribed by law and to the extent not inconsistent with, or otherwise in contravention of, the provisions of this Article IV (including, without limitation, Section of this), to authorize the issuance of one or more series of Preferred Stock, any or all of which series may have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in this Certificate of Incorporation or of any amendment hereto, or in the resolution or resolutions providing for the issue of such Preferred Stock adopted by the Board of Directors pursuant to authority expressly vested in it by the provisions of this Certificate of Incorporation. The Common Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series C-1 Preferred Stock, the Series C-2 Preferred Stock, the Series C-3 Preferred Stock, the Series C-4 Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock shall have the voting powers, designations, preferences, rights, qualifications, limitations and restrictions set forth in Sections and respectively, of this. Capitalized terms used and not otherwise defined in this shall have the respective meanings ascribed to such terms in Section of this.

B. Common Stock.

1. General. Except as required by law or as provided in this Certificate, all shares of Common Stock shall be identical in all respects and shall entitle the holders thereof to the same rights and privileges, subject to the same qualifications, limitations and restrictions.

2. Dividends and Distributions. Subject to the provisions of this, including Sections C.2 and of this, the holders of shares of Common Stock shall be entitled to receive such dividends and distributions, payable in cash or otherwise, as may be declared thereon by the Board of Directors of the Corporation (the "*Board*") from time to time out of assets or funds of the Corporation legally available therefor. The holders of shares of Common Stock shall be entitled to share equally, on a per share basis, in such dividends or distributions, subject to the limitations described below.

3. Voting. Each holder of Common Stock shall be entitled to vote on each matter (a) expressly required by the DGCL or (b) otherwise submitted to a vote of the stockholders of the Corporation, including the election of directors, except for matters subject to a separate class vote by one or more classes and/or series of capital stock of the Corporation other than Common Stock to the extent such separate class vote is required by the DGCL or this Certificate. Each holder of shares of Common Stock shall be entitled to one vote per share of Common Stock held by such holder on each matter to be voted on by such stock.

4. Liquidation. The holders of all Common Stock shall be entitled to liquidation distributions, if any, pursuant to Section of this.

C. Preferred Stock.

1. Designation. A total of (a) 1,000,000 shares of Preferred Stock shall be designated as Series A Convertible Participating Preferred Stock (the "*Series A Preferred Stock*"), (b) 4,711,247shares of Preferred Stock shall be designated as Series B Preferred Stock (the "*Series B Preferred Stock*"), (c) 800,000 shares of Preferred Stock shall be designated as Series C-1 Preferred Stock (the "*Series C-1 Preferred Stock*"), 666,667 shares of Preferred Stock shall be designated as Series C-2 Preferred Stock (the "*Series C-2 Preferred Stock*"), 502,604 shares of Preferred Stock shall be designated as Series C-3 Preferred Stock (the "*Series C-3 Preferred Stock*"), and 4,250,000 shares of Preferred Stock shall be designated as Series C-4 Preferred Stock (the "*Series C-4 Preferred Stock*" and, collectively with the Series C-1 Preferred Stock, the Series C-2 Preferred Stock and the Series C-3 Preferred Stock, the "*Series C Preferred Stock*"), (d) 3,000,000 shares of Preferred Stock shall be designated as Series D Preferred Stock (the "*Series D Preferred Stock*"), and 26,606,306 shares of Preferred Stock shall be designated as Series E Preferred Stock (the "*Series E Preferred Stock")*.

2. Dividends

2.1Series E Preferred Stock Dividends. The holders of Series E Preferred Stock shall be entitled to receive, out of funds legally available therefore and prior and in preference to any declaration or payment of any dividend on any other class or series of the Corporation's capital stock, cumulative dividends on such shares of Series E Preferred Stock(the "*Series E Preferred Dividend*"), payable in cash, when, as and if declared by the Board, at a rate per share equal to seven percent (7%) per annum of the Applicable Per Share Stated Value for such share of Series E Preferred Stock, calculated on the basis of actual days elapsed over a 365-day year. The Series E Preferred Dividends shall accrue and compound on an annual basis, commencing on the Series E Issue Date, whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. The Corporation shall not declare, pay, make or Issue a dividend or other distribution with respect to any other class or series of the Corporation's capital stock (other than a dividend payable in shares of Common Stock in connection with an Extraordinary Stock Event) unless and until all accrued and unpaid Series E Preferred Dividends have been paid.

2.2Series B and Series D Preferred Stock Dividends. The holders of Series B Preferred Stock and the holders of Series D Preferred Stock shall be entitled to receive, out of funds legally available therefore and prior and in preference to any declaration or payment of any dividend on any other class or series of the Corporation's capital stock other than the Series E Preferred Stock, cumulative dividends on such shares of Series B Preferred Stock and Series D Preferred Stock, *pari passu*,(the "*Series B and D Preferred Dividend*"), payable in cash, when, as and if declared by the Board, at a rate per share equal to seven percent (7%) per annum of the Applicable Per Share Stated Value for such share of Series B Preferred Stock or for such of Series D Preferred Stock, as the case may be calculated on the basis of actual days elapsed over a 365-day year. The Series B and D Preferred Dividends shall accrue and compound on an annual basis, commencing on the Series B Issue Date for the Series B Preferred Stock, and commencing on the Series D Issue Date for the Series D Preferred Stock, whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. The Corporation shall not declare, pay, make or Issue a dividend or other distribution with respect to any other class or series of the Corporation's capital stock, other than dividends on the Series E Preferred Stock (and other than a dividend payable in shares of Common Stock in connection with an Extraordinary Stock Event), unless and until all accrued and unpaid Series B and D Preferred Dividends have been paid.

2.3Participating Dividends. In the event the Corporation shall pay, make or Issue all dividends on the Series E Preferred Stock and on the Series B Preferred Stock and on the Series D Preferred Stock as specified in Sections C.2.1 and C.2.2, and shall pay, make or Issue an additional dividend or other distribution with respect to the Common Stock payable in cash, securities of the Corporation (other than shares of Common Stock in connection with an Extraordinary Stock Event), or other assets, then, and in each such event, the holders of Series A Preferred Stock and Series C Preferred Stock shall receive, at the same time such distribution is made with respect to the Common Stock, the cash, securities or such other assets of the Corporation which such holders would have received had their shares of Preferred Stock been converted into Common Stock, in the manner set forth in Section . of this, immediately prior to the record date for determining holders of Common Stock entitled to receive such distribution.

3. Liquidation, Dissolution and Winding Up.

3.1Treatment at Liquidation, Dissolution or Winding Up.

(a) Series E Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary (as applicable), or in the event of its insolvency, whether under the DGCL, federal bankruptcy laws or other applicable federal or state laws (a "*Liquidation*"), the holders of outstanding shares of the Series E Preferred Stock shall be entitled to be paid out of the assets of the Corporation available for distribution to holders of the Corporation's capital stock of all classes, whether such assets are capital, surplus or earnings ("*Available Assets*"), before any distribution or payment is made to any holders of Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or any class or series of the Corporation's capital stock which is, with respect to the Senior Preferred Stock, Junior Stock, an amount per share of Series E Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series E Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series E Preferred Stock would receive with respect to such share of Series E Preferred Stock had such share been converted into Common Stock pursuant to Section. of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series E Liquidation Preference*").

If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Series E Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(b) Series A, Series B and Series D Liquidation Preferences. After payment in full of the Series E Liquidation Preference, the holders of outstanding shares of the Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock (together, the "*Senior Preferred Stock*") shall be entitled to be paid out of the Available Assets, *pari passu*, before any distribution or payment is made to any holders of Common Stock, Series C Preferred Stock or any class or series of the Corporation's capital stock which is, with respect to the Senior Preferred Stock, Junior Stock as follows:

(A) in the case of the Series A Preferred Stock, an amount per share of Series A Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series A Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series A Preferred Stock would receive with respect to such share of Series A Preferred Stock had such share been converted into Common Stock pursuant to Section. of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series A Liquidation Preference*"); and

(B) in the case of the Series B Preferred Stock, an amount per share of Series B Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series B Preferred Stock, plus (2) accrued and unpaid dividends thereon, plus (3) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series B Preferred Stock would receive with respect to such share of Series B Preferred Stock had such share been converted into Common Stock pursuant to Section of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series B Liquidation Preference*").

(C) in the case of the Series D Preferred Stock, an amount per share of Series D Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series D Preferred Stock, plus (2) accrued and unpaid dividends thereon, plus (3)declared and unpaid dividends, if any, thereon, and (II) such amount per share that the holders of the Series D Preferred Stock would receive with respect to such share of Series D Preferred Stock had such share been converted into Common Stock pursuant to Section of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series D Liquidation Preference*", and together with the Series A Liquidation Preference and the Series B Liquidation Preference, the "*Senior Liquidation Preference*").

(D) The Series A Liquidation Preference, the Series B Liquidation Preference and the Series D Liquidation Preference shall rank in Liquidation *pari passu* with one another based upon the amount of the Senior Liquidation Preference payable to each such series of Senior Preferred Stock. If, upon Liquidation, the Available Assets shall be insufficient to pay the holders of Senior Preferred Stock the full amounts to which such holders otherwise would be entitled under Section of this, then the holders of Senior Preferred Stock shall share in any distribution of Available Assets pro rata in proportion to the Senior Liquidation Preference amounts which would otherwise be payable upon such Liquidation with respect to the outstanding shares of the Senior Preferred Stock held by such holders if all Senior Liquidation Preference amounts with respect to such shares were paid in full.

(E) If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Senior Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(c) Series C Liquidation Preference.

(i) After payment in full of the Series E Liquidation Preference and the Senior Liquidation Preference, the holders of outstanding shares of Series C Preferred Stock shall be entitled to be paid out of any remaining Available Assets before any distribution or payment is made to any holders of Common Stock or any class or series of the Corporation's capital stock which is, with respect to the Series C Preferred Stock, Junior Stock as follows:

(A) in the case of the Series C-1 Preferred Stock, an amount per share of Series C-1 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-1 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-1 Preferred Stock would receive with respect to such share of Series C-1 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-1 Liquidation Preference*");

(B) in the case of the Series C-2 Preferred Stock, an amount per share of Series C-2 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-2 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-2 Preferred Stock would receive with respect to such share of Series C-2 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-2 Liquidation Preference*");

(C) in the case of the Series C-3 Preferred Stock, an amount per share of Series C-3 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-3 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-3 Preferred Stock would receive with respect to such share of Series C-3 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-3 Liquidation Preference*"); and

(D) in the case of the Series C-4 Preferred Stock, an amount per share of Series C-4 Preferred Stock equal to the greater of (I) the sum of (1) the Applicable Per Share Stated Value for such share of Series C-4 Preferred Stock, plus (2) declared and unpaid dividends, if any, thereon and (II) such amount per share that the holders of the Series C-4 Preferred Stock would receive with respect to such share of Series C-4 Preferred Stock had such share been converted into Common Stock pursuant to Section C.5.1 of this Article IV immediately prior to such Liquidation (such greater amount, the "*Series C-4 Liquidation Preference*," and collectively with the Series C-1 Liquidation Preference, the Series C-2 Liquidation Preference and the Series C-3 Liquidation Preference, the "*Series C Liquidation Preference*").

(ii) The Series C-1 Liquidation Preference, the Series C-2 Liquidation Preference, the Series C-3 Liquidation Preference, and the C-4 Liquidation Preference shall rank in Liquidation *pari passu* with one another based upon the amount of the Series C Liquidation Preference payable to each such series of Series C Preferred Stock. If, upon Liquidation, the Available Assets shall be insufficient to pay the holders of Series C Preferred Stock the full amounts to which such holders otherwise would be entitled under Section of this, then the holders of Series C Preferred Stock shall share in any distribution of Available Assets pro rata in proportion to the Series C Liquidation Preference amounts which would otherwise be payable upon such Liquidation with respect to the outstanding shares of the Series C Preferred Stock held by such holders if all Series C Liquidation Preference amounts with respect to such shares were paid in full.

If the Available Assets include assets other than cash, then the value of such non-cash Available Assets shall be determined in good faith by the Board as of the date of the Liquidation. The Corporation shall notify in writing the holders of Series C Preferred Stock as to the Board's determination of the value of the non-cash Available Assets not later than thirty (30) calendar days prior to such Liquidation.

(d) Distributions on Common Stock. After payment in full of the Series E Liquidation Preference, the Senior Liquidation Preference and the Series C Liquidation Preference to all holders of Preferred Stock pursuant to Sections, (b) and (c) of this, and payment in full on any class or series of the Corporation's capital stock that is entitled to payment prior to the holders of Common Stock, the remaining Available Assets, if any, shall be distributed among the holders of Common Stock in proportion to the number of shares of Common Stock then held by holders of Common Stock.

3.2Treatment of Acquisition Transaction as a Liquidation.

(a) Transaction Payment. At least twenty (20) calendar days prior to the consummation of an Acquisition Transaction, the Corporation or, if the Corporation is not a party to such Acquisition Transaction, the holders of shares of capital stock of the Corporation that are parties to such Acquisition Transaction, shall provide the holders of the shares of Preferred Stock written notice of such Acquisition Transaction (the "*Event Notice*"). The Event Notice shall contain all of the material terms and conditions of the Acquisition Transaction and shall include a copy of the final or then most recent draft of the definitive documentation governing such Acquisition Transaction and the Board's good faith determination of the value of any securities or property other than cash, if any, to be received as consideration in such Acquisition Transaction. The Corporation or, if the Corporation is not a party to such Acquisition Transaction, the holders of the shares of the Corporation's capital stock that are parties to such Acquisition Transaction shall also promptly provide to the holders of any particular series of Preferred Stock any additional information concerning (i) the terms and conditions of such Acquisition Transaction, (ii) the value of the Corporation's assets or securities involved in such Acquisition Transaction and (iii) the value of any securities or property other than cash to be received as consideration in such Acquisition Transaction, all as the Applicable Percentage of such series of Preferred Stock may reasonably request from time to time. Unless the Applicable Percentage of any particular series of Preferred Stock delivers a notice to the Corporation within fifteen (15) calendar days after receipt of an Event Notice stating that such Acquisition Transaction shall not be treated as a Liquidation for purposes of this Certificate with respect to such series of Preferred Stock, such Acquisition Transaction shall be treated as a Liquidation with respect to such series of Preferred Stock. Upon the closing of any Acquisition Transaction, and as a condition to the consummation of the Acquisition Transaction, and prior to or concurrently with consideration from any such Acquisition Transaction being paid to the Corporation or to stockholders of the Corporation other than holders of Preferred Stock, the Corporation shall pay, or cause to be paid, to the holders of Preferred Stock, and each holder of Preferred Stock shall be entitled to receive, in cash, securities or other property, before any distribution or payment is made to any holders of Common Stock or any Junior Stock and in the order and priority set forth in Section of this, an amount per share which is equal to (A) in the case of the Series A Preferred Stock, the Series A Liquidation Preference (the " *Series A Transaction Payment*"), (B) in the case of the Series B Preferred Stock, the Series B Liquidation Preference (the "*Series B Transaction Payment*"), (C) in the case of the Series C-1 Preferred Stock, the Series C-1 Liquidation Preference (the "*Series C-1 Transaction Payment*"), (D) in the case of the Series C-2 Preferred Stock, the Series C-2 Liquidation Preference (the "*Series C-2 Transaction Payment*"), (E) in the case of the Series C-3 Preferred Stock, the Series C-3 Liquidation Preference (the "*Series C-3 Transaction Payment*"), (F) in the case of the Series C-4 Preferred Stock, the Series C-4 Liquidation Preference (the "*Series C-4 Transaction Payment*,"), (G) in the case of the Series D Preferred Stock, the Series D Liquidation Preference (the *"Series D Transaction Payment")*and (H)in the case of the Series E Preferred Stock, the Series E Liquidation Preference (the "*Series E Transaction Payment")* and collectively with the Series A Transaction Payment, the Series B Transaction Payment, the Series C-1 Transaction Payment, the Series C-2 Transaction Payment, the Series C-3 Transaction Payment, the Series C-4 Transaction Payment, and the Series D Transaction Payment the "*Preferred Stock Transaction Payment*"). In the case of an Acquisition Transaction of a type described in clause (a) of the definition of "Acquisition Transaction" contained in Section of this, for purposes of calculating the Series A Liquidation Preference, the Series B Liquidation Preference, the Series C Liquidation Preference, the Series D Liquidation Preference and the Series E Liquidation Preference for purposes of this Section. (a) of Article IV, the amount of Available Assets shall be deemed to be an amount equal to the aggregate value of all consideration to be received pursuant to such Acquisition Transaction, net of any liabilities of the Corporation not assumed or otherwise paid by the acquiring Person. In the case of an Acquisition Transaction involving any transaction or transactions of a type described in clauses (b) or (c) of the definition of "Acquisition Transaction" contained in Section of this, for purposes of calculating the Series A Liquidation Preference, the Series B Liquidation Preference, the Series C Liquidation Preference, the Series D Liquidation Preference and the Series E Liquidation Preference for purposes of this Section C. (a) of Article IV, the amount of Available Assets shall be deemed to be an amount equal to the aggregate value of all consideration to be received pursuant to such Acquisition Transaction divided by a fraction, the numerator of which is the total number of shares of Common Stock deemed to be sold, conveyed, disposed, exchanged, or otherwise transferred by the Corporation's stockholders pursuant to such Acquisition Transaction (determined on a Fully-Diluted Basis) and the denominator of which is the sum of the total number of shares of Common Stock outstanding and the total number of shares of Common Stock Issuable with respect to Common Stock Equivalents outstanding immediately prior to such Acquisition Transaction. Upon the payment in full of any Preferred Stock Transaction Payment to the holders of any series of Preferred Stock, the shares of such series of Preferred Stock shall be deemed cancelled and shall no longer be outstanding and the holders of such shares shall have no further rights in respect thereof.

(b) Payment of Transaction Payment.

(i) If all of the consideration payable to the Corporation or to the Corporation's stockholders consists of cash, then the Preferred Stock Transaction Payment shall be paid in cash. If any consideration consisting of securities or property other than cash is Issued or payable to the Corporation or to the Corporation's stockholders in the Acquisition Transaction, then the Preferred Stock Transaction Payment shall be paid to the holders of each series of Preferred Stock to whom any Preferred Stock Transaction Payment is to be paid in such portions of cash and such property and securities such that all holders of such series of Preferred Stock and Common Stock shall receive the same proportion of cash and such property and securities in respect of the amounts to which they are entitled to receive pursuant to Section C.of this. Any securities utilized to make the Preferred Stock Transaction Payment, if any, shall have the same rights, preferences and restrictions (including whether the issuance or sale of such securities is registered or entitled to registration rights under the Securities Act of 1933, as amended) as the securities Issued or payable in the Acquisition Transaction.

(ii) The holders of Series E Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid prior and in preference to the holders of Senior Preferred Stock. The holders of Senior Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid only after the holders of Series E Preferred Stock shall have received full payment of all Preferred Stock Transaction Payment amounts to which such holders of Series E Preferred Stock are entitled under Section C.3.2(a) of this Article IV. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Senior Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Senior Preferred Stock shall share in any payment of the Preferred Stock Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Senior Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full. The holders of Senior Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid prior and in preference to the holders of Series C Preferred Stock. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Senior Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Senior Preferred Stock shall share in any payment of the Preferred Stock Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Senior Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full. The holders of Series C Preferred Stock shall be paid the Preferred Stock Transaction Payment to which such holders are entitled to be paid only after the holders of Senior Preferred Stock shall have received full payment of all Preferred Stock Transaction Payment amounts to which such holders of Senior Preferred Stock are entitled under Section C.3.2(a) of this Article IV. If the amount of Available Assets (as determined in accordance with Section C.3.2(a) of this Article IV) shall be insufficient to pay to the holders of Series C Preferred Stock the full amount of the Preferred Stock Transaction Payment to which such holders otherwise would be entitled under Section C.3.2(a) of this Article IV, then the holders of Series C Preferred Stock shall share ratably in any payment of the Preferred Stock Transaction Payment pro rata in proportion to the Preferred Stock Transaction Payment amounts which would otherwise be payable with respect to the outstanding shares of Series C Preferred Stock held by all such holders if all Preferred Stock Transaction Payment amounts with respect to such shares were paid in full.

3.3 Valuation of Non-Cash Items. If any of the consideration which is Issuable or payable to the Corporation or to the Corporation's stockholders consists of securities or property other than cash or evidences of indebtedness (for which the value of such evidences of indebtedness shall be deemed to be the principal amount thereof), then the value of such securities or other property shall be deemed its fair market value, determined as follows:

(a) Any securities not subject to investment letter or other similar restriction on free marketability covered by (b) below shall be valued as follows:

(i) If such securities are traded on a securities exchange or through the Nasdaq National Market, then the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Acquisition Transaction;

(ii) If such securities are actively traded over-the-counter, then the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Acquisition Transaction; and

(iii) If there is no active public market, then the value shall be the fair market value thereof, as determined in good faith, by the Board on the date such determination is made.

(b) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an "Affiliate," as such term is defined in regulation D promulgated under the Securities Act of 1933, as amended, or former "Affiliate") shall be to make an appropriate discount from the market value thereof determined as above in (a)(i), (a)(ii), or (a)(iii) to reflect the approximate fair market value thereof, as determined in good faith by the Board.

(c) Any property other than cash and evidences of indebtedness and securities shall have the fair market value of such property as determined in good faith, by the Board on the date such determination is made.

(d) The foregoing methods for valuing securities and property other than cash and evidences of indebtedness to be paid or Issued in connection with an Acquisition Transaction shall, upon approval by the stockholders of the definitive agreements governing the Acquisition Transaction, be superseded by any determination of such value set forth in the definitive agreements governing such Acquisition Transaction.

4. Voting Rights.

4.1General. In addition to the specific voting and consent rights of the Series E Preferred Stock provided in this Section C. and in Section of this, each holder of Preferred Stock shall be entitled to vote together with the Common Stock and all other series and classes of the Corporation's capital stock permitted to vote with the Common Stock on all matters submitted to a vote of the holders of the Common Stock (including election of directors) in accordance with the provisions of this Section , except with respect to matters in respect of which one or more other classes or series of the Corporation's capital stock is entitled to vote as a separate class under the DGCL or the provisions of this Certificate. Each holder of Preferred Stock shall be entitled to notice of any stockholders' meeting at the same time and in the same manner as notice is given to all other stockholders entitled to vote at such meetings. For each vote in which holders of Preferred Stock are entitled to participate, the holder of each share of Preferred Stock shall be entitled to that number of votes per share to which such holder would have been entitled had such share of Preferred Stock then been converted into shares of Common Stock pursuant to the provisions of Section of this, at the record date for the determination of those holders entitled to vote on such matters or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is solicited.

4.2Board of Directors.

(a) Board Size. The authorized number of directors constituting the entire Board shall be five (5) (or such smaller or larger number as may be authorized in compliance with Section. of this). The Board will remain unchanged at five members and shall not be modified or have an increase in size without the prior written consent of the placement agent for the 2012 common stock offering for a period of one year following the expiration of any lock up agreement entered into in connection with the Pubco Transaction.

(b) Series E Preferred Stock Directors. For so long as any shares of Series E Preferred Stock remain outstanding, the Applicable Percentage of the Series E Preferred Stock shall be entitled to elect two (2) members of the Board (the "*Series E Preferred Stock Directors*") at each meeting, or pursuant to each consent of the Corporation's stockholders, for the election of directors, and to remove from office, with or without cause, any Series E Preferred Stock Directors and to fill any vacancy caused by the death, resignation or removal of any Series E Preferred Stock Director.

(c) Other Directors. The holders of a majority of the Preferred Stock and of the Common Stock outstanding, voting together as a single class (with each share of Preferred Stock being entitled to the number of votes determined in accordance with the last sentence of Section of this), shall be entitled to elect all members of the Board not specified in Section of this at each meeting, or pursuant to each consent of the Corporation's stockholders, for the election of directors, and to remove from office, with or without cause, any directors elected pursuant to this Section and to fill any vacancy caused by the death, resignation or removal of any such director.

(d) Term. The directors shall be divided into three classes, designated Class I, Class II and Class III. Class I shall consist of two independent directors, Class II shall consist of the two Series E Preferred Stock Directors, and Class III shall consist of the chief executive officer. Each such director shall serve for a term ending on the date of the third annual meeting of shareholders following the annual meeting at which the director was elected. Notwithstanding the foregoing, each director shall serve until his successor is duly elected and qualified, or until his retirement, death, resignation or removal. In order to implement a staggered Board of Directors at the 2012 Annual Meeting of Stockholders, Class I shall serve a one (1) year term; Class II shall serve a two (2) year term; and Class III shall serve a three (3) year term. Directors elected at each annual meeting after the 2012 Annual Meeting of Stockholders shall be elected for a 3 year term as specified above.

4.3Additional Voting Rights. The holders of shares of Series E Preferred Stock, voting together as a single class, shall have the additional voting and consent rights set forth in Section of this.

5. Conversion. The holders of Preferred Stock shall have the following rights and be subject to the following obligations with respect to the conversion of shares of Preferred Stock into shares of Common Stock. The number of shares of Common Stock which a holder of any particular series of Preferred Stock shall be entitled to receive upon the conversion of such Preferred Stock shall be equal to the product obtained by multiplying the Conversion Rate then in effect for such series by the number of shares of such series of Preferred Stock being converted. The "*Conversion Rate*" means (a) with respect to the Series A Preferred Stock, the Series C-1 Preferred Stock, the Series C-2 Preferred Stock, the Series C-3 Preferred Stock and the Series C-4 Preferred Stock, as applicable, the quotient obtained by dividing an amount equal to (i) the Applicable Per Share Stated Value for such series of Preferred Stock by (ii) the Applicable Conversion Price for such series of Preferred Stock, (b) with respect to the Series B Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series B Preferred Stock, plus (B) all accrued and unpaid Series B and D Preferred Dividends attributable to the Series B Preferred Shares by (b) the Applicable Conversion Price for the Series B Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series B Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series B and D Dividends in cash upon the conversion of the Series B Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series B Preferred Stock in determining the Conversion Rate for the Series B Preferred Stock, and (c) with respect to the Series D Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series D Preferred Stock, plus (B) all accrued and unpaid Series B and D Preferred Dividends attributable to the Series D Preferred shares by (b) the Applicable Conversion Price for the Series D Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series D Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series B and D Dividends in cash upon the conversion of the Series D Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series D Preferred Stock in determining the Conversion Rate for the Series D Preferred Stock, and (d) with respect to the Series E Preferred Stock, the quotient obtained by dividing an amount equal to (i) the sum of (A) Applicable Per Share Stated Value for the Series E Preferred Stock, plus (B) all accrued and unpaid Series E Preferred Dividends attributable to the Series E Preferred shares by (b) the Applicable Conversion Price for the Series E Preferred Stock; provided that, if the holders of the Applicable Percentage of the Series E Preferred Stock elect to receive, in exchange, all or a portion of an amount equal to their pro rata share of all accrued and unpaid Series E Dividends in cash upon the conversion of the Series E Preferred Stock, then that amount shall not be added to the Applicable Per Share Stated Value for the Series E Preferred Stock in determining the Conversion Rate for the Series E Preferred Stock.

5.1Optional Conversion. Subject to and in compliance with the provisions of this Section, each share of Preferred Stock may, at the option of the holder thereof, be converted at any time, and from time to time, into fully-paid and non-assessable shares of Common Stock.

5.2Automatic Conversion.

(a) Consent/Initial Public Offering/Pubco Transaction. Each share of Preferred Stock and accrued dividends shall automatically convert into fully-paid and non-assessable shares of Common Stock upon the first to occur of (a) the affirmative approval or written consent of, and written notice to, the Corporation by the Applicable Percentage of Series E Preferred Stock, voting as a separate class or (b) the time immediately prior to the consummation of a Qualified Initial Public Offering or a Pubco Transaction, in each case, without any further action by the holder, and whether or not the certificate or certificates representing such shares are surrendered to the Corporation,. To the extent permitted by law, an automatic conversion pursuant to clause (a) of this Section shall be deemed to have been effected as of the close of business on the date on which such written notice shall have been received by the Corporation.

5.3Anti-Dilution Adjustments.

(a) Adjustment of Conversion Price Upon Issuance of Shares of Common Stock. Except as provided in Sections and, for so long as there are any shares of Series E Preferred Stock or 2012 Common Stock Warrants outstanding, if and whenever at any time and from time to time after the Series E Original Issue Date or the 2012 Common Stock Warrant Original Issue Date, as applicable, the Corporation shall Issue, or is, in accordance with Sections through of this, deemed to have Issued, any shares of Common Stock for no consideration or a consideration per share less than the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the time of such Issuance or, as to Common Stock Equivalents, Net Consideration Per Share less than the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the time of such Issuance or the exercise price for the 2012 Common Stock Warrants, as applicable,, then, forthwith upon such Issue or sale, the 2012 Common Stock Warrant exercise price shall be subject to proportional adjustment and/or the Applicable Conversion Price with respect to the Series E Preferred Stock shall be reduced to the price (calculated to the nearest tenth of a cent) determined by multiplying such Common Stock Warrant exercise price or Applicable Conversion Price for the Series E Preferred Stock by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding (calculated on a Fully Diluted Basis) immediately prior to the Issuance of such additional shares of Common Stock or Common Stock Equivalents;

N(1) = the number of shares of Common Stock which the aggregate consideration, if any (including the aggregate Net Consideration Per Share with respect to the issuance of Common Stock Equivalents), received or receivable by the Corporation for the total number of such additional shares of Common Stock so Issued or deemed to be Issued would purchase at the Applicable Conversion Price for the Series E Preferred Stock or 2012 Common Stock Warrant exercise price, as applicable, in effect immediately prior to such Issuance; and

N(2) = the number of such additional shares of Common Stock so Issued or deemed to be Issued.

The provisions of this Section may be waived as to all shares of Series E Preferred Stock, in any instance, upon the written consent or agreement of the Applicable Percentage for the Series E Preferred Stock.

No other series of Preferred Stock other than the Series E Preferred Stock shall have any rights for an adjustment of conversion price pursuant to this Section C.5.3 upon the issuance of shares of common stock of the Company.

For purposes of this Section, the following Sections to shall be applicable:

(i) Consideration for Shares. For purposes of this Section , the consideration received by the Corporation for the Issuance of any shares of Common Stock or Common Stock Equivalents shall be computed as follows:

(A) insofar as such consideration consists of cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith (excluding amounts paid for accrued interest, dividends or distributions);

(B) insofar as such consideration consists of property other than cash, the value of such property received by the Corporation shall be deemed to be the fair value of such property at the time of such Issuance as determined in good faith by the Board (which determination must include the approval of the Series E Preferred Stock Directors), without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith;

(C) insofar as such consideration consists of consideration other than cash or property, the value of such other consideration shall be deemed to be the aggregate par value of Common Stock Issued or deemed Issued; and

(D) in the event that Common Stock or Common Stock Equivalents shall be Issued in connection with the Issue of other securities of the Corporation, together comprising one integral transaction in which no special consideration is allocated to such Common Stock or Common Stock Equivalents by the parties thereto, the allocation of the aggregate consideration between such other securities and the Common Stock Equivalents shall be as determined in good faith by the Board (which determination must include the approval of the Series E Preferred Stock Directors).

(ii) Issuance of Common Stock Equivalents. The Issuance of any Common Stock Equivalents shall be deemed an Issuance of the maximum number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalents (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion), and no further adjustments shall be made upon exercise, conversion or exchange of such Common Stock Equivalents. If the terms of any Common Stock Equivalents (excluding Common Stock Equivalents which are themselves Exempted Securities), the Issuance of which did not result in an adjustment to Applicable Conversion Price for the Series E Preferred Stock, pursuant to the provisions of this Section C.5.3 (either because the Net Consideration Per Share of the Common Stock subject thereto was equal to or greater than the Applicable Conversion Price for the Series E Preferred Stock then in effect, or because Common Stock Equivalent was issued before the Series E Original Issue Date), are revised after the Series E Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Common Stock Equivalent the effect of which is to provide for either (A) any increase or decrease in the number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of any such Common Stock Equivalent or (B) any increase or decrease in the Net Consideration Per Share payable to the Corporation with respect to the Issuance of such Common Stock Equivalent or the Common Stock subject thereto upon such exercise, conversion or exchange, then such Common Stock Equivalent, as so amended or adjusted, and the maximum number of shares of Common Stock issuable upon the complete exercise, conversion or exchange of such Common Stock Equivalent (assuming the satisfaction of all vesting or other similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion) shall be deemed to have been issued effective upon such revision becoming effective.

(iii) Net Consideration Per Share. The "*Net Consideration Per Share*" which shall be receivable by the Corporation for any shares of Common Stock Issued upon the exercise, exchange or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Corporation for the Issuance of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Corporation upon complete exercise, exchange or conversion thereof, divided by the aggregate number of shares of Common Stock that would be Issued if such Common Stock Equivalents were fully exercised, exchanged or converted (assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion).

(iv) Revisions to Common Stock Equivalents. If the terms of any Common Stock Equivalent, the issuance of which resulted in an adjustment to the Series E Preferred Stock pursuant to the terms of this Section C5.3 of this Article IV, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Common Stock Equivalent, the effect of which is to provide for either (1) any increase or decrease in the number of shares of Common Stock Issuable upon the complete exercise, conversion or exchange of any such Common Stock Equivalent or (2) any increase or decrease in the Net Consideration Per Share payable to the Corporation with respect to the Issuance of such Common Stock Equivalent or the Common Stock subject thereto upon such exercise, conversion or exchange, then, effective upon such revisions becoming effective, the Applicable Conversion Price for the Series E Preferred Stock computed upon the original Issuance of such Common Stock Equivalent (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Applicable Conversion Price as would have been obtained had such revised terms been in effect upon the original date of Issuance of such Common Stock Equivalent. Notwithstanding the foregoing, no readjustment pursuant to this clause (iv) shall have the effect of increasing such Applicable Conversion Price to an amount which exceeds the lower of (A) the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the original adjustment made as a result of the issuance of such Common Stock Equivalent, or (B) the Applicable Conversion Price for such Series E Preferred Stock that would have resulted from any Issuances of Common Stock or Common Stock Equivalents (other than deemed Issuances of Common Stock as a result of the Issuance of such revised Common Stock Equivalent) between the original adjustment date and such readjustment date.

(v) Expiration and Termination of Common Stock Equivalents. Upon the expiration or termination of any unexercised, unconverted or unexchanged Common Stock Equivalent (or portion thereof) which resulted (either upon its original Issuance or upon a revision of its terms) in an adjustment to the Applicable Conversion Price for the Series E Preferred Stock pursuant to the terms of this Section C.5.3, the Applicable Conversion Price for the Series E Preferred Stock shall be readjusted to such Applicable Conversion Price as would have been obtained had such Common Stock Equivalent (or portion thereof) never been issued. Notwithstanding the foregoing, no readjustment pursuant to this clause (v) shall have the effect of increasing such Applicable Conversion Price to an amount which exceeds the lower of (A) the Applicable Conversion Price for the Series E Preferred Stock in effect immediately prior to the original adjustment made as a result of the Issuance of such Common Stock Equivalent, or (B) the Applicable Conversion Price for such the Series E Preferred Stock that would have resulted from any Issuances of Common Stock or Common Stock Equivalents (other than deemed Issuances of Common Stock as a result of the Issuance of such expired or terminated Common Stock Equivalent (or portion thereof)) between the original adjustment date and such readjustment date.

(vi) Record Date. In case the Corporation shall establish a record date with respect to the holders of any class or series of the Corporation's capital stock or other securities for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock or Common Stock Equivalents or (B) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the Issuance of the shares of Common Stock deemed to have been Issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(vii) Exceptions to Anti-Dilution Adjustments. The anti-dilution adjustments set forth in this Section shall not apply under any of the circumstances contemplated in Section or of this. Further, the anti-dilution adjustments set forth in this Section . shall not apply with respect to the following (collectively, the "*Excluded Securities*"):

(A) the Issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) to employees, consultants, officers or directors of the Corporation or any Affiliate or Subsidiary of the Corporation pursuant to a stock option plan or restricted stock plan or arrangement, which Issuance of shares of Common Stock (or options to purchase or acquire shares of Common Stock) are unanimously approved by the Board;

(B) the Issuance of any shares of Common Stock upon the conversion of outstanding shares of Preferred Stock;

(C) the Issuance of shares of Common Stock in a Qualified Initial Public Offering or merger of the Corporation with or acquisition of the Corporation by an entity whose capital stock is traded on a public exchange;

(D) the Issuance of Common Stock, Common Stock Equivalents or other securities to financial institutions or other lenders or lessors in connection with any loan, commercial credit arrangement, equipment financing, commercial property lease or similar transaction that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and are approved by a majority of the entire Board (which majority must include the Series E Preferred Stock Directors);

(E) the Issuance of any Common Stock, Common Stock Equivalent or other securities pursuant to any capital reorganization, reclassification or similar transaction that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and that are approved a majority of the entire Board (which majority must include the Series E Preferred Stock Directors);

(F) the Issuance of any Common Stock, Common Stock Equivalent or other securities to an entity as a component of any business relationship with such entity for the purpose of (1) joint venture, technology licensing or development activities, (2) distribution, supply or manufacture of the Corporation's products or services or (3) any other arrangement involving corporate partners that is primarily for purposes other than raising equity capital for the Corporation or any of its Affiliates and, in each of the foregoing cases, is approved by a majority of the entire Board (which majority must include the Series E Preferred Stock Directors); or

(G) the Issuance of Common Stock, Common Stock Equivalents or other securities in any transaction primarily for the purpose of raising equity capital for the Corporation or any of its Affiliates (1) to investment bankers, placement agents or advisors in connection with the issuance of Series E Preferred Stock, or (2) in which an exemption from the anti-dilution provisions is specifically approved in writing by the Applicable Percentage of the Series E Preferred Stock, in the case of an Issuance for a consideration or a Net Consideration Per Share less than the Applicable Conversion Price with respect to the Series E Preferred Stock which is approved a majority of the entire Board (which majority must include the Series E Preferred Stock Directors).

(b) Adjustment Upon Extraordinary Stock Event. Upon the happening of an Extraordinary Stock Event, the Applicable Conversion Price for each share of Preferred Stock shall, simultaneously with the happening of such Extraordinary Stock Event, be adjusted by multiplying such Applicable Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Stock Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Stock Event and the product so obtained shall thereafter be the Applicable Conversion Price for such share of Preferred Stock, which, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Stock Event or Events. An "*Extraordinary Stock Event*" shall mean (i) the Issuance of additional shares of Common Stock as a dividend or other distribution on outstanding shares of Common Stock, (ii) a subdivision or stock split of outstanding shares of Common Stock into a greater number of shares of Common Stock, or (iii) a combination or reverse stock split of outstanding shares of Common Stock into a smaller number of shares of Common Stock.

(c) Reorganization or Reclassification. In the event of (i) any capital reorganization, any reclassification of the capital stock of the Corporation or other change in the capital stock of the Corporation (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of any Extraordinary Stock Event), (ii) any consolidation, merger, reorganization or share exchange involving the Corporation or any Subsidiary (any such transaction described in clauses (i) and (ii) hereof, an "*Extraordinary Transaction*"), then the holder of each share of Preferred Stock shall have the right thereafter to receive, in lieu of the shares of Common Stock immediately theretofore receivable upon the conversion of such shares of Preferred Stock pursuant to Section of this, the kind and amount of shares of stock or other securities or property as may be Issued or payable with respect to or in exchange for that number of shares of Common Stock into which such holder's shares of Preferred Stock is, immediately prior to such Extraordinary Transaction, convertible, and in any such case appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions of this Certificate (including, without limitation, provisions for adjustments of the Applicable Conversion Price for such Preferred Stock) shall thereafter be applicable in relation to any shares of stock or other securities or property thereafter deliverable upon the exercise of such conversion rights. The provision for such conversion right to the holders of Preferred Stock shall be a condition precedent to the consummation by the Corporation of any Extraordinary Transaction, unless (a) such Extraordinary Transaction is also an Acquisition Transaction and (b) the Applicable Percentage of any particular series of Preferred Stock does not provide notice to the Corporation in accordance with Section of this of their election to not treat such Acquisition Transaction as a Liquidation, in which case, the provisions of Section of this, and not this Section , shall apply with respect to such particular series. The provisions of this Section shall apply with respect to each series of Preferred Stock that provides notice to the Corporation in accordance with Section of this of such series' election to not treat such Acquisition Transaction as a Liquidation. The provisions of this Section shall similarly apply to successive Extraordinary Transactions.

(d) Notice of Adjustment. Upon any adjustment of the Applicable Conversion Price for any particular series of Preferred Stock or change in the exercise price of 2012 Common Stock Warrants, then in each such case the Corporation shall give written notice thereof to each holder of such series of Preferred Stock or 2012 Common Stock Warrants, as applicable, which notice shall state the Applicable Conversion Price resulting from such adjustment or changes in exercise price, setting forth in reasonable detail the method upon which such calculation is based.

5.4Status of Converted or Repurchased Preferred Stock. Any shares of Preferred Stock cancelled pursuant to Section of this, converted into Common Stock or acquired by the Corporation by reason of exchange, purchase or otherwise shall be cancelled and shall not be subject to reissuance, and the capital of the Corporation shall be automatically reduced by a corresponding amount. Upon the cancellation of all outstanding shares of any particular series of Preferred Stock, the provisions of the designation of such series of Preferred Stock shall terminate and have no further force and effect.

5.5Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of shares of Preferred Stock shall be made without charge to the holders thereof for any issuance, documentary, stamp or other transactional tax in respect thereof, provided that the Corporation shall not be required to pay any such tax that may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the shares of Preferred Stock which is being converted.

5.6Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Preferred Stock or of any shares of Common Stock Issued or Issuable upon the conversion of any shares of Preferred Stock in any manner which interferes with the timely conversion of such shares of Preferred Stock.

5.7Exercise Of Conversion Privilege; Delivery of Certificates. To exercise its conversion privilege under Section of this, a holder of Preferred Stock shall surrender the certificate or certificates representing the shares being converted to the Corporation at its principal office, or , if such certificate(s) have been lost, stolen or destroyed, then the holder shall deliver a certificate executed by such holder certifying to such fact, together with an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by the Corporation in connection with such lost, stolen or destroyed certificate, and shall give written notice to the Corporation at that office that such holder elects to convert such shares. Such written notice shall state the date on, or the time at which, the conversion is to be deemed effective and any conditions to such effectiveness. If such written notice does not state any such date, time or conditions, then the date when such written notice of exercise of the conversion privilege is received by the Corporation, together with the certificate or certificates representing the shares of Preferred Stock being converted (or, if applicable, the certification and indemnity agreement described above), shall be the date on which the conversion is deemed effective. The date or time at which any conversion of one or more series of Preferred Stock is deemed effective under this Section . is referred to in this Certificate as the "*Conversion Date*." Following an automatic conversion of the Preferred Stock pursuant to Section of this, each holder of Preferred Stock being so automatically converted shall, as promptly as practicable following receipt of notice of such event from the Corporation, surrender the certificate or certificates representing such Preferred Stock (or, if applicable, the certification and indemnity agreement described above) to the Corporation at the principal office of the Corporation, together with a notice containing the information specified below. Any notice required to be provided by a holder of Preferred Stock under this Section shall also state the name or names (with address or addresses) in which the certificate or certificates for shares of Common Stock issuable upon such conversion shall be issued. The certificate or certificates for shares of Preferred Stock surrendered for conversion shall be accompanied by proper assignment thereof to the Corporation or in blank. As promptly as practicable after the Conversion Date for the Preferred Stock being converted, or the date on which the Corporation receives a holder's certificate(s) (or, if applicable, the certification and indemnity agreement described above) with respect to an automatic conversion, the Corporation shall issue and deliver to the holder of the shares of Preferred Stock being converted, or on its written order, such certificate or certificates as it may request for the number of whole shares of Common Stock issuable upon the conversion of such shares of Preferred Stock in accordance with the provisions of Section of this, and cash, as provided in Section of this in respect of any fraction of a share of Common Stock issuable upon such conversion. At such time as any conversion of shares of Preferred Stock is effective, the rights of the holder as holder of the converted shares of Preferred Stock shall cease and the person(s) in whose name(s) any certificate(s) for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby, regardless of whether the certificates that represented the converted shares of Preferred Stock have been surrendered by the holder thereof.

5.8Fractional Shares; Distributions; Partial Conversion. No fractional shares of Common Stock shall be Issued upon conversion of shares of Preferred Stock into shares of Common Stock and no payment or adjustment shall be made upon any conversion on account of any cash distributions on the shares of Common Stock Issued upon such conversion. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Section exceeds the number of shares of Preferred Stock converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of the particular series of Preferred Stock represented by the certificate or certificates surrendered that are not to be converted. If any fractional shares of Common Stock would, except for the provisions of the first sentence of this Section , be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the shares of Preferred Stock for conversion an amount in cash equal to the fair market value of such fractional share as determined in good faith by the Board.

6. Restrictions and Limitations on Corporate Action. For so long as any shares of Series E Preferred Stock are outstanding, the affirmative vote of the Applicable Percentage of Series E Preferred Stock outstanding voting as a separate class shall be required to authorize, any action by the Corporation or any of its Subsidiaries involving any of the following:

(a) the authorization, designation, creation, reclassification or Issuance of (i) any class or series of capital stock of the Corporation or any of its Subsidiaries, including without limitation, any Preferred Stock pursuant to Section A of this, (ii) any bonds, debentures, notes or other debt security of the Corporation or any of its Subsidiaries, or (iii) any securities, bonds, debentures, notes or other obligations directly or indirectly convertible into or exercisable or exchangeable for, or having optional rights to purchase or otherwise acquire, any class or series of capital stock of the Corporation or any of its Subsidiaries, other than Excluded Securities of any kind described in clauses (A) through (F), inclusive, of Section 5.3(a)(vii) of this Article IV;

(b) any increase or decrease in the authorized number of shares of capital stock of the Corporation or any of its Subsidiaries or the number of designated shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, or Series E Preferred Stock;

(c) any amendment, alteration, restatement, repeal, addition or other change to the designations, powers, preferences, rights, privileges or qualifications, limitations or restrictions of any series of Preferred Stock, whether by merger, consolidation, recapitalization, reorganization or otherwise;

(d) the declaration or payment of any dividends, payments or any other distribution, direct or indirect, on account of any securities of the Corporation or any of its Subsidiaries, or the set aside of any funds for any such purpose, except for (i) the Series E Preferred Dividends, (ii) dividends or distributions on outstanding shares of Common Stock payable solely in shares of Common Stock, (iii) dividends and distributions made in accordance with the express terms of any capital stock issued with the approval of the Applicable Percentage of Series E Preferred Stock, voting as a separate class, in accordance with Section of this, and (iv) dividends, payments and distributions by Subsidiaries of the Corporation to the Corporation;

(e) the redemption, repurchase, retirement or other acquisition by the Corporation or any of its Subsidiaries of any capital stock or other securities of the Corporation or any such Subsidiary, except for shares of Common Stock repurchased upon termination of an officer, employee, director or consultant at the lower of fair market value, as reasonably determined by the Board, or cost pursuant to a restricted stock purchase agreement that is approved by a majority of the entire Board;

(f) any financing arrangement or incurrence of any indebtedness, whether pursuant to the issuance of securities or otherwise, for or on behalf of the Corporation or any Subsidiary in aggregate principal amount outstanding at any time in excess of $500,000 including, without limitation, loan agreements, credit lines, letters of credit and capitalized leases;

(g) any (i) Liquidation, or (ii) Acquisition Transaction, in either case with respect to the Corporation or any of its Subsidiaries;

(h) any merger or consolidation of the Corporation with or into any other Person or permitting any of the Corporation's Subsidiaries to merge or consolidate with or into any other Person;

(i) any amendment, alteration, restatement, repeal, addition or other change to any provision of this Certificate or the Bylaws of the Corporation or any of its Subsidiaries' respective or similar constitutive documents, whether by merger, consolidation, recapitalization, reorganization or otherwise;

(j) any (i) adoption, approval, amendment or modification of any stock option plan, stock purchase plan, equity incentive plan or any similar plan, (ii) adoption, approval, amendment or modification of (A) the form of stock option agreement or restricted stock purchase or grant agreement or (B) stock option agreement or restricted stock purchase or grant agreement entered into by the Corporation or any of its Subsidiaries (including, without limitation, the acceleration of any vesting schedule thereunder and the termination, waiver or modification of the Corporation's repurchase rights thereunder), (iii) adoption or approval of any stock appreciation, phantom stock or similar rights or any grant thereof and (iv) any grant of stock options with an exercise price per share or unit that is less than the fair market value of such share or unit on the date of such grant (as reasonably determined by a majority of the entire Board) or issue or sell capital stock pursuant to restricted stock awards or restricted stock purchase agreements at a price per share or unit less than the fair market value of such share or unit on the date of such issuance or sale (as reasonably determined by a majority of the entire Board);

(k) any increase or decrease in the authorized number of directors comprising the entire Board;

(l) any participation by the Corporation or allowance of any Subsidiary to participate in any business other than the business of researching, developing, manufacturing, marketing or selling pharmaceutical products or otherwise conducting business in the biopharmaceutical industry;

(m) any purchase, lease, license or other acquisition of any other Person, whether by equity purchase, merger, consolidation, reorganization, or otherwise, or of all or substantially all of the assets of any other Person, or the entering into by the Corporation or any of its Subsidiaries of a share exchange with another Person;

(n) the making of any loans, extensions of credit or guarantees other than (i) extensions of trade credit to unaffiliated third parties (other than employees) in the ordinary course of business, (ii) loans and advances to employees of the Corporation in the ordinary course of business not to exceed $50,000 in the aggregate outstanding at any time or (iii) guarantees of any indebtedness or contractual obligations incurred by any of the Corporation's Subsidiaries that are approved by a majority of the entire Board;

(o) the making of any capital expenditure in any fiscal year in excess of $500,000 not included in the annual budget for such fiscal year that is approved by a majority of the entire Board;

(p) any change of the Corporation's independent public accounting firm or any material change in accounting methods or policies not required to be made in accordance with accounting principles generally accepted in the United States;

(q) the entering into of any transaction with the Corporation's Affiliates (other than (A) normal employment and benefits arrangements approved by a majority of the entire Board,(B) payments to directors, officers and other agents of the Corporation or any Subsidiary pursuant to indemnities contained in the Corporation's or any Subsidiary's certificate of incorporation or bylaws or other similar constitutive documents or any indemnity agreement approved by a majority of the entire Boardto which the Corporation or any Subsidiary is party or bound, or (C) transactions between the Corporation and any Subsidiary in the ordinary course of business); or

(r) take action that results in taxation of the holders of Preferred Stock under Section 305 of the Internal Revenue Code, as amended.

7. No Dilution or Impairment. The Corporation will not, by amendment of this Certificate or through any reorganization, transfer of capital stock or assets, consolidation, merger, recapitalization, share exchange, dissolution, Issue of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Preferred Stock set forth herein, but will at all times in good faith assist in carrying out all of such terms.

8. Notices of Record Date. In the event of (a) any taking by the Corporation of a record of the holders of any class or series of the Corporation's capital stock or other securities for the purpose of determining the holders thereof who are entitled to receive any dividends or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of capital stock of any class or series or any other securities or property, or to receive any other right; (b) any capital reorganization, any reclassification of the capital stock of the Corporation or other change in the capital stock of the Corporation, any merger, consolidation or reorganization, or share exchange involving the Corporation or any Subsidiary, or any sale, conveyance, disposition, exclusive license, lease or other transfer, whether pursuant to a single transaction or series of related transactions, of all or substantially all of the assets of the Corporation or any Subsidiary; or (c) any Liquidation; then and in each such event the Corporation shall mail or cause to be mailed to each holder of Preferred Stock a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right and a description of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, sale, conveyance, disposition, exclusive license, lease, transfer, consolidation, merger, or Liquidation is expected to become effective, and (iii) the time, if any, that is to be fixed, as to when the holders of record of any such capital stock or other securities shall be entitled to exchange their shares of any such capital stock or other securities for cash, securities or other property deliverable upon such reorganization, reclassification, recapitalization, sale, conveyance, disposition, exclusive license, lease, transfer, consolidation, merger, share exchange or Liquidation. Such notice shall be sent at least twenty (20) calendar days prior to the date specified in such notice on which action is being taken.

9. Reservation Of Capital Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Preferred Stock (including any shares of Preferred Stock represented by any warrants, options, subscription or purchase rights for Preferred Stock). If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock (including any shares of Preferred Stock represented by any warrants, options, subscriptions or purchase rights for such Preferred Stock), the Corporation shall take such action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

10. Notices. Whenever written notice is required to be given by the Corporation or any stockholder to holders of the Preferred Stock, or by any stockholder to the Corporation, such notice shall be in writing and unless otherwise required by this Certificate or Delaware law, shall be deemed sufficient upon receipt when delivered personally, by courier, by confirmed facsimile or by confirmed electronic mail (to the extent notification by electronic mail has been consented to), or 48 hours after being deposited in the U.S. mail as first class mail with postage prepaid, if such notice is sent to the party at the most recent address as shown on the books of the Corporation or to the Corporation at the address of its principal place of business.

D. Definitions. For purposes of this Certificate of Incorporation, the following terms used herein shall have the meanings ascribed below:

"*Acquisition Transaction*" means: (a) any sale, conveyance, disposition, exclusive license, lease or other transfer, whether pursuant to a single transaction or a series of related transactions, of all or substantially all of the assets of the Corporation and/or its Subsidiaries, determined on a consolidated basis; (b) the acquisition of the Corporation by another Person by means of any transaction or series of related transactions (including, without limitation, any consolidation, merger, reorganization, sale of stock, recapitalization, share exchange, or other transaction involving the Corporation or any Subsidiary except for Issuances of securities by the Corporation that are approved by the Applicable Percentage of the Series E Preferred Stock outstanding, voting as a separate class, as provided in Section of this), that results in the holders of the Corporation's outstanding shares of capital stock immediately prior to any such transaction not holding (by virtue of such securities issued solely pursuant to such transaction), immediately after such transaction, securities representing at least a majority of the voting power of the Person surviving or resulting from such transaction or, if the surviving or resulting Person is a subsidiary of the Corporation or another Person immediately after such transaction, the entity whose securities are issued pursuant to such transaction or series of transactions; or (c) the effectuation by the Corporation or by any of the holders of the Corporation's outstanding capital stock of a transaction or series of related transactions (except for issuances of securities by the Corporation that are approved by the Applicable Percentage of the Series E Preferred Stock outstanding and voting as a separate class, as provided in Section of this) that results in the holders of the Corporation's outstanding capital stock immediately prior to any such transaction not holding (by virtue of such securities issued solely pursuant to such transaction) immediately after such transaction, securities representing at least a majority of the voting power of the Corporation.

"*Affiliate*" has the meaning set forth in Section C.3.3(b) of this Article IV.

"*Applicable Conversion Price*" means (a) with respect to each share of Series A Preferred Stock, $2.99 per share; (b) with respect to each share of the Series B Preferred Stock, $3.00 per share;(c) with respect to each share of the Series C-1 Preferred Stock, $4.00 per share; (d) with respect to each share of the Series C-2 Preferred Stock, $6.00 per share;(e) with respect to each share of the Series C-3 Preferred Stock, $12.00 per share; (f) with respect to each share of the Series C-4 Preferred Stock, $2.00 per share; (g) with respect to each share of the Series D Preferred Stock, $2.00 per share, and (h) with respect to each share of the Series E Preferred Stock, $0.261 per share, in each of the foregoing cases, subject to adjustment in accordance with Section of this

"*Applicable Per Share Stated Value*" means (a) with respect to the Series A Preferred Stock, $4.00 per share; (b) with respect to the Series B Preferred Stock, $3.00 per share;(c) with respect to the Series C-1 Preferred Stock, $4.00 per share; (d) with respect to the Series C-2 Preferred Stock, $6.00 per share;(e) with respect to the Series C-3 Preferred Stock, $12.00 per share; (f)with respect to the Series C-4 Preferred Stock, $2.00 per share; (g) with respect to the Series D Preferred Stock, $2.00 per share, and (h) with respect to the Series E Preferred Stock, $0.261 per share in each of the foregoing cases, subject to appropriate and proportionate adjustment for stock dividends payable in shares of, stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to, such series of Preferred Stock.

"*Applicable Percentage*" means (a) with respect to any matter requiring the action, approval or consent of the holders of the Series A Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series A Preferred Stock voting together as a single class; (b) with respect to any matter requiring the action, approval or consent of the holders of the Series B Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series B Preferred Stock voting together as a single class; (c) with respect to any matter requiring the action, approval or consent of the holders of the Series C-1 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-1 Preferred Stock voting together as a single class; (d) with respect to any matter requiring the action, approval or consent of the holders of the Series C-2 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-2 Preferred Stock voting together as a single class; (e) with respect to any matter requiring the action, approval or consent of the holders of the Series C-3 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-3 Preferred Stock voting together as a single class; (f) with respect to any matter requiring the action, approval or consent of the holders of the Series C-4 Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series C-4 Preferred Stock voting together as a single class;(g) with respect to any matter requiring the action, approval or consent of the holders of the Series D Preferred Stock as a class, the holders of a majority of the outstanding shares of the Series D Preferred Stock voting together as a single class; (h) with respect to any matter requiring the action, approval or consent of the holders of the Series E Preferred Stock voting together as a single class, the holders of 51% of the outstanding shares of the Series E Preferred Stock voting together as a single class; and (g) with respect to any matter requiring the action, approval or consent of the holders of the Preferred Stock as a class, the holders of a majority of the outstanding shares of the Preferred Stock voting together as a single class; in each of the foregoing cases, with each share of Preferred Stock having a number of votes equal to the number of shares of Common Stock into which such share of Preferred Stock is then convertible.

"*Available Assets*" has the meaning as set forth in Section of this.

"*Board*" has the meaning set forth in Section of this.

"*Certificate*" means this Fifth Amended and Restated Certificate of Incorporation, as amended in accordance with the provisions hereof.

"*Common Stock*" has the meaning set forth in Section of this.

"*Common Stock Equivalents*" means warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock, any securities or other rights directly or indirectly convertible into or exercisable or exchangeable for Common Stock and any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exercisable or exchangeable securities or other rights.

"Conversion Date" has the meaning set forth in Section C.5.7 of this.

"*Conversion Rate*" has the meaning as set forth in Section of this.

"*Event Notice*" has the meaning set forth in Section of this.

"*Excluded Securities*" has the meaning set forth in Section of this.

"*Extraordinary Stock Event*" has the meaning set forth in Section of this.

"*Extraordinary Transaction*" has the meaning set forth in Section C.5.3(c) of this.

"*Fully Diluted Basis*" means, as of any time of determination, the number of shares of Common Stock which would then be outstanding, assuming the complete exercise, exchange or conversion of all then outstanding exercisable, exchangeable or convertible Common Stock Equivalents which, directly or indirectly, on exercise, exchange or conversion result in the Issuance of shares of Common Stock, assuming in each instance that the holder thereof receives the maximum number of shares of Common Stock issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of Common Stock ultimately issuable upon exercise, exchange or conversion.

"*Issue*" or "*Issuance*" in any of its forms, means to sell, grant or otherwise issue in any manner.

"*Junior Stock*" means, with respect to any particular class or series of the Corporation's capital stock, any other class or series of the Corporation's capital stock (a) specifically ranking by its terms to be junior to such particular class or series of capital stock or (b) not specifically ranking by its terms senior to or on parity with such particular class or series of capital stock, in each case, as to distribution of assets upon a Liquidation or otherwise.

"*Liquidation*" has the meaning set forth in Section of this.

"*Net Consideration Per Share*" has the meaning as set forth in Section of this.

"*Person*" means any natural person, corporation, general partnership, limited partnership, limited liability partnership, limited liability company, proprietorship, joint venture, trust, association, union, entity or other form of business organization or any governmental or regulatory authority whatsoever.

"*Preferred Stock*" has the meaning set forth in Section of this.

"*Preferred Stock Transaction Payment*" has the meaning set forth in Section of this.

"*Pubco Transaction*" means (i) a reverse merger or similar transaction between the Corporation and a corporation whose securities are publicly traded in the U.S. or other agreed upon jurisdiction, or (ii) the quotation of the Corporation's securities for purchase and sale on a U.S. quotation service (iii) any filing with an applicable regulatory body which will result in the Corporation becoming an entity whose securities are traded on a public exchange in the U.S. or other mutually agreed upon jurisdiction.

"*Qualified Initial Public Offering*" means the closing of the Corporation's initial direct public offering or underwritten public offering on a firm commitment basis pursuant to an effective registration statement on Form S-1 or any successor forms thereto filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation (a) in which (i) the Corporation actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Common Stock of the Corporation is listed on a national securities exchange.

"*Senior Liquidation Preference*" has the meaning set forth in Section. of this.

"*Senior Preferred Stock*" has the meaning set forth in Section of this.

"*Series A Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series A Preferred Stock*" has the meaning set forth in Section of this.

"*Series B Issue Date*" means, with respect to a share of Series B Preferred Stock, the date upon which such share of Series B Preferred Stock was Issued by the Corporation.

"*Series B Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series B Preferred Stock*" has the meaning set forth in Section of this.

"*Series B Original Issue Date*" means the date on which the first share of Series B Preferred Stock was Issued by the Corporation.

"*Series B and D Preferred Dividend*" has the meaning set forth in Section of this.

"*Series E Preferred Dividend*" has the meaning set forth in Section of this.

"*Series E Preferred Stock Director*" has the meaning set forth in Section of this.

"*Series C Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series C Preferred Stock*" has the meaning set forth in Section of this.

"*Series C-1 Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series C-1 Preferred Stock*" has the meaning set forth in Section of this.

"*Series C-2 Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series C-2 Preferred Stock*" has the meaning set forth in Section of this.

"*Series C-3 Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series C-3 Preferred Stock*" has the meaning set forth in Section of this.

"*Series C-4 Liquidation Preference*" has the meaning set forth in Section. of this.

"*Series C-4 Preferred Stock*" has the meaning set forth in Section of this.

"*Series D Issue Date*" means, with respect to a share of Series D Preferred Stock, the date upon which such share of Series D Preferred Stock was Issued by the Corporation.

"*Series D Liquidation Preference*" has the meaning set forth in Section. of this.

"Series D Preferred Stock" has the meaning set forth in Section C.1 of this Article IV.

"*Series E Issue Date*" means, with respect to a share of Series E Preferred Stock, the date upon which such share of Series E Preferred Stock was Issued by the Corporation.

"*Series E Liquidation Preference*" has the meaning set forth in Section of this.

"Series E Preferred Stock" has the meaning set forth in Section C.1 of this Article IV.

"*Subsidiary*" or "*Subsidiaries*" means any Person of which the Corporation, directly or indirectly through one or more intermediaries owns or controls at the time at least fifty percent (50%) of the outstanding voting equity or similar interests or the right to receive at least fifty percent (50%) of the profits or earnings or aggregate equity value.

"*2012 Common Stock Warrants*" means the warrants to purchase Common Stock issued as part of the offering of up to $25 million in 2012.

"*2012 Common Stock Warrant Issue Date*" means, with respect to a share of 2012 Common Stock Warrants, the date upon which such warrant was issued to the holder thereof in accordance with the terms of such warrant.

ARTICLE V

In furtherance of and not in limitation of the powers conferred by statute, the Board, acting by majority vote, is expressly authorized to make, alter or repeal the Bylaws of the Corporation, subject to the provisions of Section . of of this Certificate.

ARTICLE VI

The directors of the Corporation shall be entitled to the benefits of all limitations on the liability of directors generally that are now or hereafter become available under the applicable law. Without limiting the generality of the foregoing, no director of the Corporation shall be personally liable to the Corporation or to any stockholder of the Corporation for monetary damages for breach of fiduciary duty as a director, provided that this provision shall not limit the liability of a director (a) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (b) for acts of omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the director derived an improper personal benefit. Any repeal or modification of this Article VI shall only be prospective and shall not affect any rights or protection under this Article VI in effect at the time of the alleged occurrence of any action or omission to act giving rise to liability.

ARTICLE VII

Elections of directors need not be by written ballot except and to the extent provided in the Bylaws of the Corporation.

ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide.

ARTICLE IX

The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware, at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE X

Pursuant to Section 122(17) of the DGCL, the Corporation hereby renounces any interest or expectancy of the Corporation or any of its Subsidiaries in, or in being offered an opportunity to participate in, any and all business opportunities that are presented to any of the holders of Preferred Stock, any of their respective Affiliates or any of the respective partners, members, directors, stockholders, employees or agents of any of the foregoing (including, without limitation, any representative or affiliate of such holders of Preferred Stock serving on the Board or the board of directors or other governing body of any Subsidiary of the Corporation (as applicable, a "*Governing Board*")) (collectively, the "*Covered Persons*"). Without limiting the foregoing renunciation, the Corporation on behalf of itself and its Subsidiaries (i) acknowledges that the Covered Persons may have or be affiliated with Persons having investments in other businesses similar to, and that may compete with, the businesses of the Corporation and its Subsidiaries ("*Competing Businesses*") and (ii) agrees that the Covered Persons shall have the unfettered right to make investments in, or have relationships with, other Competing Businesses independent of their investments in the Corporation. No Covered Person shall, by virtue of such Covered Person holding capital stock of the Corporation or having persons designated by or affiliated with such Covered Person serving on or observing at meetings of any Governing Board or otherwise, have any obligation to the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation to refrain from competing with the Corporation and any of its Subsidiaries, making investments in or having relationships with Competing Businesses, or otherwise engaging in any commercial activity, and none of the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation shall have any right with respect to any investment or activities undertaken by such Covered Person. Without limitation of the foregoing, each Covered Person may engage in or possess any interest in other business ventures of any nature or description, independently or with others, similar or dissimilar to the business of the Corporation or any of its Subsidiaries, and none of the Corporation, any of its Subsidiaries or any other holder of capital stock or securities of the Corporation shall have any rights or expectancy by virtue of such Covered Person's relationships with the Corporation, or otherwise, in and to such independent ventures or the income or profits derived therefrom; and the pursuit of any such ventures by any Covered Person, even if such investment is in a Competing Business, shall not for any purpose be deemed wrongful or improper. No Covered Person shall be obligated to present any particular investment opportunity to the Corporation or its Subsidiaries even if such opportunity is of a character that, if presented to the Corporation or such Subsidiary, could be taken by the Corporation or such Subsidiary, and each Covered Person shall continue to have the right for its own respective account, or to recommend to others, any such particular investment opportunity.

The provisions of this Article X in no way limit (A) any applicable duties of any Covered Person with respect to the protection of any proprietary or confidential information of the Corporation and any of its Subsidiaries including, without limitation, any applicable duty to not disclose or use such proprietary or confidential information improperly or (B) any express written contractual obligation to which any Covered Person may otherwise be bound to the Corporation or any of its Subsidiaries. In addition, except as expressly set forth in this Article Xwith respect to business opportunities, the provisions of this Article X in no way limit any fiduciary or other duty of any Covered Person. Nothing contained in this Article X shall in any way expand any fiduciary or other duty of any Covered Party beyond such duties as may be imposed under the DGCL.

ARTICLE XI

The Corporation shall, to the maximum extent permitted from time to time under the laws of the State of Delaware, indemnify and hold harmless any person who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding or claim, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was or has agreed to be a director or officer of the Corporation or while a director or officer is or was serving at the request of the Corporation as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against any and all expenses (including reasonable and invoiced attorneys' fees and expenses), judgments, fines, penalties and amounts paid in settlement or incurred in connection with the investigation, preparation to defend or defense of such action, suit, proceeding or claim; provided, that the foregoing shall not require the Corporation to indemnify any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person. The Corporation shall advance all expenses incurred by an indemnified party in connection with the investigation, defense, settlement or appeal of any civil or criminal action, suit or proceeding referred to in this Article XI (including amounts actually paid in settlement of any such action, suit or proceeding). All rights pursuant to this Article XI shall inure to the benefit of the heirs and legal representatives of such person. Any repeal or modification of the foregoing provisions of this shall not adversely affect any right or protection of a director or officer of this Corporation existing at the time of such repeal or modification.

ARTICLE XII

Subject to the provisions of Section . of of this Certificate, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate, in the manner now or hereafter prescribed by statute. As permitted by Section 242(b)(2) of the Code, the number of authorized shares of any class or series of Common Stock, Preferred Stock and any other class or series of the Corporation's capital stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of holders of a majority of the Common Stock and Preferred Stock of the Corporation, voting together as a single class, with each share of Preferred Stock having a number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock are then convertible, without the approval of the holders of any class or series of Common Stock, Preferred Stock and other capital stock voting as a separate class.

IN WITNESS WHEREOF, the undersigned has caused this Fifth Restated Certificate of Incorporation to be duly executed on behalf of the Corporation on September __, 2012.

ACTINIUM PHARMACEUTICALS, INC.

By:

Print Name: Jack V. Talley

Title: President and Chief Executive Officer

FUNDING INSTRUCTIONS
EXHIBIT D

PRE-INITIAL CLOSING CAPITALIZATION
EXHIBIT E-1

Class	Total Fully Diluted[1]	% of Fully Diluted
Common Stock	2,407,805	3.0%
Preferred Stock		
Series A	1,337,793	1.7%
Series B	6,888,246	8.5%
Series C	6,219,271	7.7%
Series D	4,049,293	5.0%
Series E	28,159,502	34.9%
Total Preferred Stock	46,654,105	57.8%
Unsecured Notes	4,310,325	5.3%
Warrants and Options[2]	27,332,414	33.9%
Total	80,704,649	100.0%

[1] Based on 2,407,805 shares of Common Stock outstanding and 46,654,105 shares of Preferred Stock (the Preferred Stock reflects accrued dividends in the amount of 5,117,281 shares of Common Stock reserved for issuance upon conversion of the Preferred Stock into Common Stock) outstanding as of August 31, 2012. All shares of Preferred Stock and accrued dividends related thereto will be converted into shares of Common Stock of Pubco upon the closing of the Reverse Merger.

[2] The warrants and options are inclusive of all warrants and options issued to holders of preferred stock and notes, to consultants, and under the employee stock option plans.

POST-INITIAL CLOSING CAPITALIZATION
EXHIBIT E-2

[This table will be provided once initial investors and investments are known.]

FORM OF LEGAL OPINION
EXHIBIT F
October__, 2012

To purchasers of the Units of Actinium Pharmaceuticals, Inc. as signatories
to the Unit Purchase Agreement, dated _____, 2012 (the "Purchasers") and

Laidlaw & Company (UK) LTD., as Placement Agent

Ladies and Gentlemen:

We have acted as counsel for Actinium Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the offering of Units described in that certain Confidential Private Placement Memorandum, dated October 1, 2012 (the "Memorandum") and pursuant to the Unit Purchase Agreement, dated as of _____, 2012, including the Exhibits and Schedules attached thereto (the "Purchase Agreement"), by and among the Company and the Purchasers. This opinion is being rendered to you pursuant to Section 5.1.8 of the Purchase Agreement in connection with the Initial Closing of the sale of the Units. Capitalized terms used and not otherwise defined in this opinion have the respective meanings given to them in the Purchase Agreement.

In connection with the opinions expressed herein we have made such examination of matters of law and of fact as we considered appropriate or advisable for the purposes hereof. As to matters of fact material to the opinions expressed herein, we have relied upon the truth and correctness of the representations and warranties as to factual matters contained in and made by the Company and the Purchasers in the Purchase Agreement and Subscription Agreements and upon the truth and correctness of certificates and statements of government officials and of officers of the Company.

We have examined originals or copies of such corporate documents or records of the Company as we have considered appropriate for the opinions expressed herein. We have assumed for the purposes of this opinion genuineness of all signatures, the legal capacity of natural persons, the authenticity of the documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as certified, facsimile or photostatic copies, and the authenticity of the originals of such copies.

For purposes of the opinions expressed herein concerning the Purchase Agreement, the Investor Rights Agreement, the Amended and Restated Stockholders Agreement, Warrants and other Transaction Documents we have assumed with respect to each of the Purchasers, (i) that each Purchaser has the power, corporate and other, to enter into and perform its obligations thereunder, (ii) that each of the Transaction Documents has been duly and validly authorized by all requisite corporate action of each Purchaser, that is not an individual, and constitutes the legal, valid, binding and enforceable obligation of each Purchaser, (iii) that the representations and warranties made in the Purchase Agreement by the Purchasers and the Company are true and correct and (iv) that any wire transfers, drafts or checks tendered by you will be honored.

We have also assumed that (i) there are no extrinsic agreements or understandings among the parties to the Transaction Documents that would modify or interpret the respective terms thereof or the respective rights or obligations of the parties thereunder, (ii) there exists no provision of any other document binding on the Company that would be inconsistent with the Transaction Documents or our opinion as expressed herein, (iii) there has not been any mutual mistake of fact or misunderstanding, fraud, duress or undue influence in connection with the Transaction Documents or the transactions contemplated thereby, (iv) all parties to the Transaction Documents will act in accordance with, and will refrain from taking any action that is forbidden by, the terms and conditions of the Transaction Documents, (v) the respective Board of Directors or other governing body of each of the parties to the Transaction Documents has complied with its fiduciary duties with respect to the authorization of the Transaction Documents and the transactions contemplated thereby, (vi) the execution, delivery and performance of the Transaction Documents by the parties thereto did not, and the consummation of the transactions contemplated by the Transaction Documents will not, violate or conflict with any provision of any judgment, order, writ, injunction or decree of any court or governmental authority, or violate or result in a breach of or constitute a default or require any consent (other than such consent as have been obtained) under any provision of any other agreement, contract, instrument or obligation to which any such party is a party of by which any such party or its properties are bound, (vii) the Fifth Amended and Restated Certificate of Incorporation of the Company (the "Fifth Restated Certificate") has been properly filed with the Delaware Secretary of State, (viii) the application of the laws of the State of Delaware to each of the Transaction Documents would not be contrary to a fundamental policy of a jurisdiction (other than the State of Delaware) (a) the law of which would be applicable to the Transaction Documents in the absence of an effective choice of other law thereunder and (b) which has a materially greater interest than the State of Delaware in the determination of a particular issue relating to the Transaction Documents; (ix) prior to or contemporaneous with the issuance of the Units pursuant to the Purchase Agreement, the Company will have received the consideration thereof specified in the Purchase Agreement; and (x) Section 203 of the General Corporation Law of the State of Delaware (the "Delaware Corporate Law") is not applicable to the Company pursuant to subsection (b)(4) thereof.

As used in this opinion, the expression "we are not aware" or the phrase "to our knowledge", or any similar expression or phrase with respect to our knowledge of matters of fact, means as to matters of fact that, based on the actual knowledge of individual attorneys within the firm principally responsible for handling current matters for the Company (and not including any constructive or imputed notice of any information), and after an examination of documents referred to herein and after inquiries of certain officers of the Company, no facts have been disclosed to us that have caused us to conclude that the opinions expressed are factually incorrect; but beyond that we have made no factual investigation for the purposes of rendering this opinion. Specifically, but without limitation, we have made no inquiries of securities holders or employees of the Company, other than inquiries of certain officers of the Company.

This opinion relates solely to the application of New York and Delaware Corporate law and the Securities Act of 1933, as amended (the "Securities Act") and regulations promulgated thereunder, as such laws are currently in effect without regard to any judicial decisions or interpretations. Special rulings by authorities administering such laws have not been sought or obtained. We express no opinion with respect to the effect or application of any other laws, including, without limitation, the applicability of or compliance with the Delaware Securities Act, 6 Del. C § 7301 et. seq. or the securities laws of any other states (or any rules or regulations promulgated thereunder). We express no opinion on the question of what law would govern the interpretation or enforcement of the Transaction Documents, and our opinion is based upon the assumption that the current internal laws of the State of Delaware would govern the provisions thereof.

Based upon our examination of and reliance upon the foregoing and subject to the further limitations, exceptions, qualifications and assumptions set forth below and set forth in the Schedules, we are of the opinion that, as of the date hereof:

1. The Company and each subsidiary is a corporation duly incorporated, validly existing and in good standing under the laws of the jurisdiction of its incorporation and in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company. The Company and each subsidiary has all requisite corporate power and authority to own and operate its properties and assets as, to our knowledge, it is presently conducted.

2. The Company has all requisite corporate power and authority to execute and deliver the Transaction Documents and to issue and sell the Units, including the Common Stock and Warrants underlying the Units, issued by the Company at the Initial Closing (collectively, the "Initial Units") and the shares of Common Stock issuable upon exercise of the Warrants (collectively, the "Warrant Shares"), and to perform its obligations under the Transaction Documents.

3. Immediately prior to the Initial Closing, the authorized capital stock of the Company consists of: (a) 283,463,176 shares of Common Stock, of which 2,407,805 shares are issued and outstanding; and (b) 41,536,824 shares of Preferred Stock, of which (i) 1,000,000 shares are designated as Series A Preferred Stock, all of which are issued and outstanding, (ii) 4,711,247 shares are designated as Series B Preferred Stock, all of which are issued and outstanding, (iii) 800,000 shares are designated as Series C-1 Preferred Stock, all of which are issued and outstanding, (iv) 666,667 shares are designated as Series C-2 Preferred Stock, all of which are issued and outstanding, (v) 502,604 shares are designated as Series C-3 Preferred Stock, all of which are issued and outstanding, (vi) 4,250,000 shares are designated as Series C-4 Preferred Stock, all of which are issued and outstanding, (v) 3,000,000 shares are designated as Series D Preferred Stock, all of which are issued and outstanding, and (vi) 26,606,306 shares are designated as Series E Preferred Stock, all of which are issued and outstanding.

4. The Initial Shares and the Warrant Shares have been duly authorized and reserved for issuance by all necessary corporate action, and the Initial Shares, when issued and delivered against payment therefor in accordance with the provisions of the Purchase Agreement, and the Warrant Shares, when issued upon exercise of the Warrants, respectively, in accordance with the provisions of the Fifth Restated Certificate, will be validly issued, fully paid and non-assessable.

5. The execution and delivery by the Company of, and the performance by the Company of its obligations under, the Transaction Documents have been duly authorized by all necessary corporate action and such Transaction Documents have been duly executed and delivered by the Company. The Fifth Restated Certificate has been duly adopted by all requisite corporate action of the Company and as of the Initial Closing will be duly and validly filed in the State of Delaware. The Transaction Documents constitute the valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms. The Company's execution and delivery of the Transaction Documents and the offer, issue, and sale of the Initial Shares and the Warrants thereunder will not violate, conflict with, or result in any breach of any of the terms, conditions, or provisions of, or constitute a default or give rise to any right of termination, cancellation or acceleration under: (a) the Fifth Restated Certificate or bylaws of the Company (as certified by the Secretary of the Company at the Initial Closing) and (b) any judgment, order, or decree applicable to the Company or its properties that is specifically identified in the Schedules to the Purchase Agreement.

6. Except as already obtained and in effect as of the Initial Closing, and other than in connection with any securities laws (with respect to which we direct you to the parenthetical below and to paragraph 7 below), to our knowledge, no consent, approval, order or authorization of, or registration, qualification, designation, declaration, or filing with, any governmental authority (other than the filings or amended filings required to be made after the Initial Closing under Regulation D promulgated under the Securities Act) is required on the part of the Company in connection with the execution and delivery of the Purchase Agreement, or the offer, issue, sale and delivery of the Initial Shares and the Warrants, or the other transactions to be consummated at the Initial Closing pursuant to the Transaction Documents.

7. Based solely on the representations of each of the Purchasers in Section 4 of the Purchase Agreement, each of the offer, issuance, and sale of the Initial Shares and of the Warrants pursuant to, and in conformity with, the Purchase Agreement constitutes a transaction that is exempt from or not subject to the registration requirements of Section 5 of the Securities Act.

Our opinions expressed above are specifically subject to the following limitations, exceptions, qualifications and assumptions:

(A) We are admitted to the practice of law in the State of Hawaii and do not hold ourselves out as being experts on the law of any jurisdiction other than the laws of the State of Hawaii and the federal laws of the United States of America. In rendering the foregoing opinions, many of which relate to matters of Delaware law and New York law, we have made such inquiry as we believe reasonably necessary to render such opinions. The foregoing opinions are limited to the laws of the States of Delaware and New York and the federal laws of the United States of America currently in effect, and we express no opinion with respect to applicability of, or compliance with, the Delaware Securities Act, 6 Del. C. §7301 et seq., or any rules or regulations promulgated thereunder.

(B) In rendering the opinion in paragraph 1 above, we have relied solely on a Certificate of Good Standing obtained from the Delaware Secretary of State, to determine that the Company is a corporation duly incorporated, validly existing and in good standing under the Delaware Corporate Law.

(C) With respect to our opinion in paragraph 3 above regarding issued and outstanding capital stock of the Company, such opinion is based solely on our review of a certificate of an officer of the Company and copies of the Company's stock ledger and resolutions of the Company's Board of Directors relating to the issuances of such shares, and a representation by the Company that no former stockholder of Actinium Pharmaceuticals, Ltd., a Bermuda corporation ("APL"), exercised appraisal rights pursuant to the merger in which APL was merged with and into the Company within the period allowed under Bermuda law.

(D) The legality, validity, binding nature and enforceability of the Company's obligations under the Transaction Documents may be subject to or limited by (1) bankruptcy, insolvency, reorganization, arrangement, moratorium, fraudulent transfer and other similar laws affecting the rights of creditors generally; (2) principles of equity (whether relief is sought in a proceeding at law or in equity), including, without limitation, concepts of materiality, commercial reasonableness, good faith and fair dealing, equitable defenses, the applicable law relating to fiduciary duties (regardless of whether considered or applied in a proceeding in equity or law); (3) the discretion of any court of competent jurisdiction in which any proceeding in respect of any of the Transaction Documents or the transactions contemplated thereby may be brought, including, without limitation, with respect to awarding specific performance or injunctive relief and other equitable remedies; and (4) without limiting the generality of the foregoing, (a) principles requiring consideration of the impracticability or impossibility of performance of the Company's obligations at the time of the attempted enforcement of such obligations, and (b) the effect of judicial decisions and state statutes which indicate that provisions of the Transaction Documents that permit you to take action or make determinations may be subject to a requirement that such action be taken or such determinations be made on a reasonable basis in good faith or that it be shown that such action is reasonably necessary for your protection.

(E) We express no opinion concerning the past, present or future fair market value of any securities.

(F) Except as expressly set forth in paragraphs 4, 5 and 6, we express no opinion regarding any consents, approvals, notices or filings in connection with the Transaction Documents required under the securities or other laws of any State or foreign government, or the compliance of the Company with the laws or requirements of any State of foreign government.

(G) We express no opinion with respect to the legality, validity, binding effect or enforceability of (i) any provision of any of the Transaction Documents which purports, or would operate, to render ineffective any waiver or modification not in writing; (ii) any provision of any of the Transaction Documents which purports to bind non-signatories thereto; (iii) any provision of any of the Transaction Documents to the extent such provision purports to obligate any party to cause other persons or entities to act (or refrain from acting) in a certain way insofar as such provision relates to the actions of such other person or entities; (iv) any provision of any of the Transaction Documents which a court finds to be unconscionable at the time it was made or contrary to public policy; (v) Section 7 of the Purchase Agreement and Section 6 of the Investor Rights Agreement to the extent that the provisions thereof may be limited by applicable federal or state securities laws or public policy or as to any indemnification provision which indemnifies a party against, or requires contributions towards, that party's liability for its own wrongful or negligent acts; and (vi) Section 8.1 of the Purchase Agreement and Section 11.1 of the Investor Rights Agreement to the extent the parties thereto did not freely agree that any legal action or proceeding arising out of or in connection with those agreements would be brought in the forum stated in Section 8.1 of the Purchase Agreement and Section 11.1 of the Investor Rights Agreement or that any such agreement is determined to be unreasonable at the time of the legal action or proceeding.

(H) We express no opinion as to your compliance with any federal or state law relating to any Purchaser's legal or regulatory status or the nature of any Purchaser's business.

(I) Our opinions are subject to the effect of judicial decisions that may permit the introduction of extrinsic evidence to interpret the terms of written contracts.

(J) We express no opinion with respect to shares of the Company's Common Stock and Series A Preferred Stock issued and outstanding prior to the Initial Closing, or with respect to shares of the Company's Common Stock issued pursuant to the Agreement and Plan of Merger dated July 2, 2007, pursuant to which APL was merged with and into the Company, including without limitation, as to whether such shares have been duly authorized, validly issued, fully paid and non-assessable, or whether the issuances thereof complied with United States federal and applicable state and foreign securities laws.

(K) We express no opinion as to the effect of prior or subsequent issuances of securities of the Company, to the extent that such issuances may be integrated with the Closing and may include purchasers who do not meet the definition of "accredited investors" under Rule 501 of Regulation D and equivalent definitions under state securities or "blue sky" laws. We have assumed for purposes of this opinion that no finders or brokers were used by the Company and Purchasers in connection with this financing.

(L) We express no opinion as to compliance with applicable antifraud statutes, rules or regulations of applicable United States federal or state laws concerning the issuance or sale of securities, including, without limitation, the accuracy and completeness of the information provided by the Company to the Purchasers in connection with the offer and sale of the Initial Shares.

(M) We have assumed (1) that the Transaction Documents, and the transactions contemplated thereby, were fair, just and reasonable to the Company and its stockholders at the time of their authorization by the Company's Board of Directors and stockholders, and (2) that the conditions to the Initial Closing set forth in Section 5.1 of the Purchase Agreement have been satisfied or waived by the Purchaser or the Placement Agent.

(N) In rendering our opinions herein, we express no opinion concerning purported waivers of statutory or other rights, court rules and defenses to obligations where such waivers (i) are against public policy or (ii) constitute waivers of rights which by law, regulation or judicial decision may not otherwise be waived.

(O) We note that notwithstanding any covenants to the contrary contained in the Transaction Documents: (i) the stockholders of the Company may dissolve the Company under Section 275(c) of the Delaware Corporate Law upon the consent of all the stockholders entitled to vote thereon; (ii) a stockholder owning at least 90% of the outstanding shares of each class of stock of the Company entitled to vote thereon may effect a merger with the Company under Section 253 of the Delaware Corporate Law; and (iii) the stockholders of the Company may amend the Bylaws.

(P) We express no opinion as to:

1 Any provision providing for the exclusive jurisdiction of a particular court or purporting to waive rights to trial by jury, service of process or objections to the laying of venue or to forum on the basis of forum *non conveniens*, in connection with any litigation arising out of or pertaining to the Transaction Documents;

2 The value, validity or adequacy of the consideration paid by you for the Common Stock or the Warrants;

3 The effect of any law or equitable principles (including, but not limited to, 10 Del. C. §3912) that govern and afford judicial discretion regarding the determination of damages and entitlement to attorneys' fees and other costs or limit the amount of attorneys' fees that can be recovered under certain circumstances, or the effect of any law providing that where a contract permits one party to the contract to recover attorneys' fees, the prevailing party in any action to enforce any provision of the contract shall be entitled to recover its reasonable attorneys' fees;

4 The effect of any law that limits the enforceability of provisions releasing, exculpating or exempting a party from liability for its own action or inaction, to the extent the action or inaction involves gross negligence, recklessness, willful misconduct or unlawful conduct.

(Q) We express no opinion relating to the provisions of the original Investor Rights Agreement, dated as of October 24, 2006 insofar as they related to APL, or the merger of APL with and into the Company.

(R) In rendering our opinions herein, we have assumed that Section 203 of the Delaware Corporate Law is not applicable to the Company pursuant to section (b)(4) thereof.

The foregoing opinions are rendered to the Purchasers and the Placement Agent as of the date first written above solely for the benefit of the Purchasers and the Placement Agent in connection with the sale of the Units and may not be delivered to, quoted or relied upon by any person other than you, or for any other purpose or in connection with any other transaction, without our prior written consent. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company. We assume no obligation to advise you of facts, circumstances, events or developments that hereafter may be brought to our attention, and which may alter, affect or modify the opinions expressed herein.

Very truly yours,

FORM OF INDEMNIFICATION AGREEMENT
EXHIBIT G

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (the "Agreement") is made as of ____ __, 2012, by and between Actinium Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and _____ (the "Indemnitee").

RECITALS

The Company and Indemnitee recognize the increasing difficulty in obtaining liability insurance for directors, officers and key employees, the significant increases in the cost of such insurance and the general reductions in the coverage of such insurance. The Company and Indemnitee further recognize the substantial increase in corporate litigation in general, subjecting directors, officers and key employees to expensive litigation risks at the same time as the availability and coverage of liability insurance has been severely limited. Indemnitee does not regard the current protection available as adequate under the present circumstances, and Indemnitee and agents of the Company may not be willing to continue to serve as agents of the Company without additional protection. The Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, and to indemnify its directors, officers and key employees so as to provide them with the maximum protection permitted by law.

AGREEMENT

In consideration of the mutual promises made in this Agreement, and for other good and valuable consideration, receipt of which is hereby acknowledged, the Company and Indemnitee hereby agree as follows:

1. **Indemnification.**

(a) **Third Party Proceedings.** The Company shall indemnify Indemnitee if Indemnitee is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while an officer or director or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld) actually and reasonably incurred by Indemnitee in connection with such action, suit or proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, or, with respect to any criminal action or proceeding, that Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful.

(b) **Proceedings By or in the Right of the Company.** The Company shall indemnify Indemnitee if Indemnitee was or is a party or is threatened to be made a party to any threatened, pending or completed action or proceeding by or in the right of the Company or any subsidiary of the Company to procure a judgment in its favor by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while an officer or director or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) and, to the fullest extent permitted by law, amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld), in each case to the extent actually and reasonably incurred by Indemnitee in connection with the defense or settlement of such action or suit if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company and its stockholders, except that no indemnification shall be made in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudicated by court order or judgment to be liable to the Company in the performance of Indemnitee's duty to the Company and its stockholders unless and only to the extent that the court in which such action or proceeding is or was pending shall determine upon application that, in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

(c) **Mandatory Payment of Expenses.** To the extent that Indemnitee has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Section 1(a) or Section 1(b) or the defense of any claim, issue or matter therein, Indemnitee shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by Indemnitee in connection therewith.

2. **No Employment Rights.** Nothing contained in this Agreement is intended to create in Indemnitee any right to continued employment.

3. **Expenses; Indemnification Procedure.**

(a) **Advancement of Expenses.** The Company shall advance all expenses incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of any civil or criminal action, suit or proceeding referred to in Section l(a) or Section 1(b) hereof (including amounts actually paid in settlement of any such action, suit or proceeding). Indemnitee hereby undertakes to repay such amounts advanced only if, and to the extent that, it shall ultimately be determined that Indemnitee is not entitled to be indemnified by the Company as authorized hereby.

(b) **Notice/Cooperation by Indemnitee.** Indemnitee shall, as a condition precedent to his or her right to be indemnified under this Agreement, give the Company notice in writing as soon as practicable of any claim made against Indemnitee for which indemnification will or could be sought under this Agreement. Notice to the Company shall be directed to the Chief Executive Officer of the Company and shall be given in accordance with the provisions of Section 12(d) below. In addition, Indemnitee shall give the Company such information and cooperation as it may reasonably require and as shall be within Indemnitee's power.

(c) **Procedure.** Any indemnification and advances provided for in Section 1 and this Section 3 shall be made no later than thirty (30) days after receipt of the written request of Indemnitee. If a claim under this Agreement, under any statute, or under any provision of the Company's Certificate of Incorporation or Bylaws providing for indemnification, is not paid in full by the Company within thirty (30) days after a written request for payment thereof has first been received by the Company, Indemnitee may, but need not, at any time thereafter bring an action against the Company to recover the unpaid amount of the claim and, subject to Section 11 of this Agreement, Indemnitee shall also be entitled to be paid for the expenses (including attorneys' fees) of bringing such action. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in connection with any action, suit or proceeding in advance of its final disposition) that Indemnitee has not met the standards of conduct which make it permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed, but the burden of proving such defense shall be on the Company and Indemnitee shall be entitled to receive interim payments of expenses pursuant to Section 3(a) unless and until such defense may be finally adjudicated by court order or judgment from which no further right of appeal exists. It is the parties' intention that if the Company contests Indemnitee's right to indemnification, the question of Indemnitee's right to indemnification shall be for the court to decide, and neither the failure of the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct required by applicable law, nor an actual determination by the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) that Indemnitee has not met such applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct.

(d) **Notice to Insurers.** If, at the time of the receipt of a notice of a claim pursuant to Section 3(b) hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(e) **Selection of Counsel.** In the event the Company shall be obligated under Section 3(a) hereof to pay the expenses of any proceeding against Indemnitee, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, with counsel approved by Indemnitee, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that (i) Indemnitee shall have the right to employ counsel in any such proceeding at Indemnitee's expense; and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or (C) the Company shall not, in fact, have employed counsel to assume the defense of such proceeding, then the fees and expenses of Indemnitee's counsel shall be at the expense of the Company.

4. **Additional Indemnification Rights; Nonexclusivity.**

(a) **Scope.** Notwithstanding any other provision of this Agreement, the Company hereby agrees to indemnify the Indemnitee to the fullest extent permitted by law, notwithstanding that such indemnification is not specifically authorized by the other provisions of this Agreement, the Company's Certificate of Incorporation, the Company's Bylaws or by statute. In the event of any change, after the date of this Agreement, in any applicable law, statute, or rule which expands the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes shall be deemed to be within the purview of Indemnitee's rights and the Company's obligations under this Agreement. In the event of any change in any applicable law, statute or rule which narrows the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes, to the extent not otherwise required by such law, statute or rule to be applied to this Agreement shall have no effect on this Agreement or the parties' rights and obligations hereunder.

(b) **Nonexclusivity.** The indemnification provided by this Agreement shall not be deemed exclusive of any rights to which Indemnitee may be entitled under the Company's Certificate of Incorporation, its Bylaws, any agreement, any vote of stockholders or disinterested members of the Company's Board of Directors, the General Corporation Law of the State of Delaware, or otherwise, both as to action in Indemnitee's official capacity and as to action in another capacity while holding such office. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity even though he or she may have ceased to serve in any such capacity at the time of any action, suit or other covered proceeding.

5. **Partial Indemnification.** If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the expenses, judgments, fines or penalties actually or reasonably incurred in the investigation, defense, appeal or settlement of any civil or criminal action, suit or proceeding, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion of such expenses, judgments, fines or penalties to which Indemnitee is entitled.

6. **Mutual Acknowledgment.** Both the Company and Indemnitee acknowledge that in certain instances, Federal law or public policy may override applicable state law and prohibit the Company from indemnifying its directors and officers under this Agreement or otherwise. For example, the Company and Indemnitee acknowledge that the Securities and Exchange Commission (the "SEC") has taken the position that indemnification is not permissible for liabilities arising under certain federal securities laws, and federal legislation prohibits indemnification for certain ERISA violations. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the SEC to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

7. **Officer and Director Liability Insurance.** The Company shall, from time to time, make the good faith determination whether or not it is practicable for the Company to obtain and maintain a policy or policies of insurance with reputable insurance companies providing the officers and directors of the Company with coverage for losses from wrongful acts, or to ensure the Company's performance of its indemnification obligations under this Agreement. Among other considerations, the Company will weigh the costs of obtaining such insurance coverage against the protection afforded by such coverage. In all policies of director and officer liability insurance, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, if Indemnitee is not an officer or director but is a key employee. Notwithstanding the foregoing, the Company shall have no obligation to obtain or maintain such insurance if the Company determines in good faith that such insurance is not reasonably available, if the premium costs for such insurance are disproportionate to the amount of coverage provided, if the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit, or if Indemnitee is covered by similar insurance maintained by a parent or subsidiary of the Company.

8. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. The provisions of this Agreement shall be severable as provided in this Section 8. If this Agreement or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify Indemnitee to the full extent permitted by any applicable portion of this Agreement that shall not have been invalidated, and the balance of this Agreement not so invalidated shall be enforceable in accordance with its terms.

9. **Exceptions.** Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) **Claims Initiated by Indemnitee.** To indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought voluntarily by Indemnitee and not by way of defense, except with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law, but such indemnification or advancement of expenses may be provided by the Company in specific cases if the Board of Directors finds it to be appropriate;

(b) **Lack of Good Faith.** To indemnify Indemnitee for any expenses incurred by Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous;

(c) **Insured Claims**. To indemnify Indemnitee for expenses or liabilities of any type whatsoever (including, but not limited to, judgments, fines, ERISA excise taxes or penalties, and amounts paid in settlement) to the extent such expenses or liabilities have been paid directly to Indemnitee by an insurance carrier under a policy of officers' and directors' liability insurance maintained by the Company; or

(d) **Claims under Section 16(b).** To indemnify Indemnitee for expenses or the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended, or any similar successor statute.

10. **Construction of Certain Phrases.**

(a) For purposes of this Agreement, references to the "Company" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that if Indemnitee is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, Indemnitee shall stand in the same position under the provisions of this Agreement with respect to the resulting or surviving corporation as Indemnitee would have with respect to such constituent corporation if its separate existence had continued.

(b) For purposes of this Agreement, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on Indemnitee with respect to an employee benefit plan; and references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants, or beneficiaries; and if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan, Indemnitee shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.

11. **Attorneys' Fees.** In the event that any action is instituted by Indemnitee under this Agreement to enforce or interpret any of the terms hereof, Indemnitee shall be entitled to be paid all court costs and expenses, including reasonable attorneys' fees, incurred by Indemnitee with respect to such action, unless as a part of such action, the court of competent jurisdiction determines that each of the material assertions made by Indemnitee as a basis for such action were not made in good faith or were frivolous. In the event of an action instituted by or in the name of the Company under this Agreement or to enforce or interpret any of the terms of this Agreement, Indemnitee shall be entitled to be paid all court costs and expenses, including attorneys' fees, incurred by Indemnitee in defense of such action (including with respect to Indemnitee's counterclaims and cross-claims made in such action), unless as a part of such action the court determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

12. **Miscellaneous.**

(a) **Governing Law; Venue.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflict of law. Venue for any legal action hereunder shall be in the state or federal courts located in the Borough of Manhattan, New York, New York.

(b) **Entire Agreement; Enforcement of Rights.** This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions between them. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) **Construction.** This Agreement is the result of negotiations between and has been reviewed by each of the parties hereto and their respective counsel, if any; accordingly, this Agreement shall be deemed to be the product of all of the parties hereto, and no ambiguity shall be construed in favor of or against any one of the parties hereto.

(d) **Notices.** Any notice, demand or request required or permitted to be given under this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by fax or 48 hours after being sent by nationally-recognized courier or deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address or fax number as set forth below or as subsequently modified by written notice.

(e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(f) **Successors and Assigns.** This Agreement shall be binding upon the Company and its successors and assigns, and inure to the benefit of Indemnitee and Indemnitee's heirs, legal representatives and assigns.

(g) **Subrogation**. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the Company to effectively bring suit to enforce such rights.

[Signature Page Follows]

The parties hereto have executed this Agreement as of the day and year set forth on the first page of this Agreement.

Actinium Pharmaceuticals, Inc.

By:
Jack V. Talley
President and CEO
Address: 501 Fifth Avenue, 3rd Floor
New York, NY 10017

Fax Number: 1-800-559-6927

AGREED TO AND ACCEPTED:

Name: _____

(Signature)

Address:
_____
_____

Fax Number:

FORM OF 2012 UNIT INVESTOR RIGHTS AGREEMENT

EXHIBIT H

2012 UNIT INVESTOR RIGHTS AGREEMENT

BY AND AMONG

ACTINIUM PHARMACEUTICALS, INC.

AND

THE INVESTORS PARTY HERETO

October __, 2012

2012 UNIT INVESTOR RIGHTS AGREEMENT

THIS 2012 UNIT INVESTOR RIGHTS AGREEMENT (the "***Agreement***") is entered into as of October__, 2012, by and among Actinium Pharmaceuticals, Inc., a Delaware corporation (the "***Company***"), the persons identified on Exhibit A hereto (the "***Investors***"), and the Placement Agent (defined below).

BACKGROUND

WHEREAS, the Investors are purchasing or otherwise acquiring Units (as defined herein) pursuant to the form of Unit Purchase Agreement (the "***Purchase Agreement***") attached as an exhibit to the Private Placement Memorandum (as defined herein);

WHEREAS, as a condition of entering into the Purchase Agreement, the Investors and the Placement Agent have requested that the Company agree to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants and conditions set forth in this Agreement and in the Purchase Agreement, the parties, intending to be legally bound, mutually agree as follows:

Section 1GENERAL

1.1 **Definitions**. As used in this Agreement the following terms shall have the following respective meanings:

"Affiliate" means, with respect to any Person, any other Person who is an "affiliate" of such Person within the meaning of Rule 12b-2 of the General Rules and Regulations under the Exchange Act.

"Common Stock" means the shares of the Common Stock, $0.01 par value per share, of the Company.

"***Counterpart***" means a counterpart signature page to this Agreement in substantially the same form as Exhibit B attached to this Agreement.

"*Designated Holder*" shall have the meaning set forth in the Registration Rights Agreement.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended, and any rules or regulations promulgated thereunder, all as the same is in effect from time to time.

"***Form S-3***" means such form under the Securities Act as in effect on the date hereof or any successor form under the Securities Act that permits significant incorporation by reference of the Company's subsequent public filings under the Exchange Act

"*Holder*" means any Investor or the Placement Agent owning of record any Registrable Securities and any assignee of record of such Registrable Securities.

"***Indemnifiable Losses***" means shall mean all losses, liabilities, obligations, claims, demands, damages, penalties, settlements, causes of action, costs and expenses, including, without limitation, the actual reasonable costs paid in connection with an Indemnitee's investigation and evaluation of any claim or right asserted against such Indemnitee Party and all reasonable attorneys', experts' and accountants' fees, expenses and disbursements and court costs including, without limitation, those incurred in connection with the Indemnitee's enforcement of this Agreement and the indemnification provisions of Section 7 of this Agreement

"Registrable Securities then outstanding" means and shall be determined by the number of shares of Common Stock of the Company outstanding which are Registrable Securities plus the number of shares of Common Stock (or common stock of Pubco) issuable pursuant to outstanding securities that are then exercisable for or convertible into securities which are Registrable Securities.

"Rule 144" means Rule 144 under the Securities Act.

"Offering" means the offering of Units pursuant to the Private Placement Memorandum (defined below).

"Order of Cutbacks" has the meaning set forth in Section 2.2(b).

"Placement Agent" means Laidlaw & Company (UK) Ltd.

"*Person*" means any natural person, corporation, general partnership, limited partnership, limited liability partnership, limited liability company, proprietorship, joint venture, trust, association, union, entity or other form of business organization or any governmental or regulatory authority whatsoever.

"Private Placement Memorandum" means that certain Confidential Private Placement Memorandum dated October 1, 2012 describing the offering of Units.

"***Pubco***" has the meaning set forth in Section 2.1 hereof.

"Register," "registered," and "***registration***" each refers to a resale registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

"***Registrable Securities***" means the following shares of the Company's Common Stock (referred to herein collectively as the "Stock"): (i) all shares of Common Stock issued as part of the Units, or all shares of common stock of Pubco issued pursuant to the Reverse Merger in exchange for the Common Stock issued as part of the Units, (ii) all shares of Common Stock issuable upon exercise of the Investor Warrants (as defined in the Private Placement Memorandum), or all shares of common stock of Pubco issuable upon exercise of the warrants issued pursuant to the Reverse Merger in exchange for such Investor Warrants, and (iii) all shares of Common Stock issuable upon exercise of the Laidlaw Warrant, or all shares of common stock of Pubco issuable upon exercise of the warrant issued by Pubco to the Placement Agent pursuant to the Reverse Merger in exchange for the Laidlaw Warrant, excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which an Investor's rights under this Agreement are not assigned; provided, however, that Registrable Securities shall not include any securities (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(l) thereof so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale, or (C) if the Investor thereof is no longer entitled to exercise any right provided in this Agreement.

"*Registration Rights Agreement*" means the Registration Rights Agreement, dated June 30, 2000 and amended by Amendment No. 1 dated September 29, 2011, between the Company and certain of its stockholders (other than the Holders).

"*Registration Rights Security*" shall have the meaning set forth Section 2.1(c).

"***Reverse Merger***" has the meaning set forth in Section 2.1(a).

"***Rule 415***" means Rule 415 under the Securities Act.

"*SEC*" or **"*Commission*"** means the Securities and Exchange Commission.

"*Securities Act*" means the Securities Act of 1933, as amended, and any rules or regulations promulgated thereunder, all as the same is in effect from time to time.

"Subsidiaries" means any Person of which a Company, directly or indirectly, through one or more intermediaries owns or controls at the time at least fifty percent (50%) of the outstanding voting equity or similar interests or the right to receive at least fifty percent (50%) of the profits or earnings or aggregate equity value.

"***Transaction Documents***" has the meaning ascribed to it in the Purchase Agreement.

"***Units***" means the units of the Company's securities as described in the Private Placement Memorandum.

Section 2REGISTRATION OF REGISTRABLE SECURITIES

2.1. Company Obligation of Reverse Merger and Registration.

(a) Within thirty (30) business days following the date of the closing of the sale of the first $5,000,000 in Units (the "**Minimum Offering Amount**") under the Offering (the "**Minimum Offering Closing Date**"), the Company agrees to effect a reverse merger transaction (whether by statutory merger or share exchange) between the Company and a shell company that is current in its reports filed with the SEC under the Exchange Act and whose securities are quoted in the over-the-counter market in the United States (**"Pubco**"), whereby the Company will become a wholly-owned subsidiary of Pubco and holders of the Company's equity or equity-linked securities will receive securities of Pubco in exchange for their securities of the Company (the "**Reverse Merger"**). Immediately prior to the Reverse Merger, Pubco will have no or nominal assets or operations, no material actual liabilities or contingent liabilities, and will be eligible to have its securities traded electronically through the Depository Trust Company (DTC). The Reverse Merger shall be subject to such other terms and conditions as are reasonably satisfactory to the Placement Agent and the Company.

(b) In the event that the Company does not fulfill its obligation to consummate the Reverse Merger within thirty (30) business days following the Minimum Offering Closing Date (the "**Reverse Merger Deadline**"), or otherwise cause its securities (or the securities of a successor of the Company) to become publicly traded within thirty (30) business days following the Reverse Merger Deadline, then upon written demand of the Placement Agent, the Company shall (i) effect the return of any funds then held in the escrow account for the Offering to the investors who deposited such funds in escrow, and (ii) issue to the Placement Agent and any investors whose subscriptions in the Offering have previously closed, on a pro rata basis, warrants to purchase a number of shares of Common Stock equal to five percent (5%) of the outstanding Common Stock of the Company on a fully diluted basis, exercisable for a period of five (5) years from their date of issuance at a price of $0.55 per share and otherwise identical terms as the B Warrants (as defined in the Private Placement Memorandum). Such warrant issuance by the Company shall be in full satisfaction of its obligations to the Placement Agent and such prior investors in the Offering with respect to the delinquency of the Reverse Merger. So long as the Placement Agent has not made such written demand, then the Placement Agent and the Company may continue to solicit and close subscriptions under the Offering notwithstanding the delinquency of the Reverse Merger, provided that the Placement Agent shall retain the right to make such written demand at any time prior to the termination of the Offering and upon such demand such warrant issuance shall be allocated pro rata among all investors who invest in the Offering prior to the consummation of the Reverse Merger.

(c) The Company shall cause Pubco to file with the SEC within forty-five (45) days of the date of the final closing of the Offering (the **"Filing Deadline"**), a registration statement registering for resale all Registrable Securities and any securities defined as "Registrable Securities" under the Registration Rights Agreement (the "**Registration Rights Securities**") requested to be registered by a Designated Holder (the "**Registration Statement**"). The holders of any Registrable Securities removed from the Registration Statement as a result of a Rule 415 or other comment from the SEC shall have "piggyback" registration rights for such Registrable Securities with respect to any registration statement filed by Pubco following the effectiveness of the Registration Statement which would permit the inclusion of such Registrable Securities that were removed from the Registration Statement, provided that any such removal shall be applied in the Order of Cutbacks. In no event shall any Registration Rights Securities be removed from the Registration Statement unless all Registrable Securities hereunder have also been removed. The Company shall cause Pubco to use its reasonable best efforts to have the Registration Statement declared effective within thirty (30) days of being notified by the SEC that the Registration Statement will not be reviewed by the SEC (and in such case of no SEC review, not later than sixty (60) days after the Filing Deadline) or within 180 days after the Filing Deadline in the event the SEC provides written comments to the Registration Statement (the **"Effectiveness Deadline"**).

(d) If the Registration Statement is not filed on or before the Filing Deadline or not declared effective on or before the Effectiveness Deadline, Pubco or, if the Reverse Merger has not then been consummated, the Company, shall pay to each Holder an amount in cash equal to one-percent (1.0%) of such Holder's investment amount in the Offering on every thirty (30) day anniversary of such Filing Deadline or Effectiveness Deadline failure until such failure is cured. The payment amount shall be prorated for partial thirty (30) day periods. The maximum aggregate amount of payments to be made by Pubco or the Company as the result of such failures, whether by reason of a Filing Deadline failure, Effectiveness Deadline failure or any combination thereof, shall be an amount equal to six percent (6%) of each Holder's investment amount. Notwithstanding the foregoing, no payments shall be owed with respect to any period during which all of the Holder's Registrable Securities may be sold by such Holder under Rule 144. Moreover, no such payments shall be due and payable with respect to any Registrable Securities if Pubco is unable to register due to limits imposed by the SEC's interpretation of Rule 415, provided that any such limitation is applied in the Order of Cutbacks.

(e) The Company shall maintain, or shall cause Pubco to maintain, the Registration Statement effective for one (1) year from the date it is declared effective by the SEC or until Rule 144 of the Securities Act is available to Holders with respect to all of their Registrable Securities, whichever is earlier (the "**Effectiveness Period**").

2.2. Piggyback Registration Rights.

(a) If the Registration Statement is not filed on or before the Filing Deadline or not declared effective on or before the Effectiveness Deadline, then if at any time or from time to time the Company or Pubco shall determine to register any of its equity securities for its own account in a direct public offering or an underwritten public offering, or for the account of selling security holders in a resale registration (a "**Resale Registration**"), the Company will, or shall cause Pubco to:

(i) prior to the filing of such registration give to the Holders written notice thereof; and

(ii) include in such registration (and any related qualification under blue sky laws or other compliance), and underwriting, if any, all the Registrable Securities (subject to Rule 415 related cutbacks applied in the Order of Cutbacks) specified in a written request or requests made within thirty (30) days after receipt of such written notice from the Company by any Holder.

(b) The right of any Holder to registration in an underwritten offering pursuant to this Section 2.2 shall be conditioned upon such Holder's participation in any underwritten offering and the inclusion of Registrable Securities in any underwriting to the extent provided herein. If any Holder requests pursuant to Section 2.2(a)(ii) above to distribute its securities through an underwritten offering, such Holder shall (together with the Company and any other stockholders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Notwithstanding any other provision of this Section 2, in the case of an underwritten offering, if the Company or Pubco or the managing underwriter determines that marketing factors require a limitation of the number of shares to be underwritten or registered, the managing underwriter may limit the Registrable Securities to be included in such registration. The Company shall so advise the Holders and the other stockholders distributing their securities through such offering pursuant to piggyback registration rights, and the number of shares of Registrable Securities and other securities that may be included in the registration and underwriting shall be allocated among the holders (i) of Common Stock equivalents of Series E Preferred Shares (or shares of common stock of Pubco issued upon the Reverse Merger to the former holders of Series E Preferred Shares following the automatic conversion thereof immediately prior to the Reverse Merger), and (ii) only after all Common Stock equivalents of Series E Preferred Shares (or all shares of common stock of Pubco issued upon the Reverse Merger to the former holders of Series E Preferred Shares following the automatic conversion thereof immediately prior to the Reverse Merger) have been registered, on a pro rata basis among the Holders and holders of Common Stock equivalents of Series D Preferred Shares, Series C Preferred Shares, Series B Preferred Shares and Series A Preferred Shares (or holders of shares of common stock of Pubco issued to the former holders of such preferred shares following the automatic conversion thereof immediately prior to the Reverse Merger) and the Designated Holders of Registration Rights Securities (or all shares of common stock of Pubco issued upon the Reverse Merger to the former Designated Holders in exchange for Registration Rights Securities, and, finally, if any allocation remains available for registration after the foregoing, (iii) on a pro rata basis among any other participating securities holders. In the event the Company or the managing underwriter does determine that marketing factors require a limitation of the number of shares to be underwritten (the "Cutback"), such Cutback shall be applied first to reduce, pro rata, holders of Common Stock and common stock equivalents other than preferred stock and Registration Rights Securities (or holders of common stock and common stock equivalents of Pubco who received such common stock and common stock equivalents in exchange for Common Stock and Common Stock equivalents other than preferred stock and Registration Rights Securities pursuant to the Reverse Merger) excluding the Holders, next, pro rata, to reduce the Holders, the Designated Holders and any other holders of Common Stock equivalents of Series A Preferred Shares, Series B Preferred Shares, Series C Preferred Shares, and Series D Preferred Shares (or holders of shares of common stock of Pubco issued to the former holders of such preferred shares following the automatic conversion thereof immediately prior to the Reverse Merger) , all before it shall be applied pro rata to reduce holders of common stock equivalents of Series E Preferred Shares (or holders of shares of common stock of Pubco issued to the former holders of such Series E Preferred Shares following the automatic conversion thereof immediately prior to the Reverse Merger) (the foregoing order of cutbacks being referred to herein as the "***Order of Cutbacks***"). [Note to 2012 Unit Investors: The order of cutbacks is subject to modification to improve registration priority of 2012 Unit Investors with respect to cutbacks if the company is able to procure necessary amendments to existing Registration Rights Agreements prior to initial closing under Purchase Agreement **]** To facilitate the allocation of shares in accordance with the above provisions, the Company, Pubco or the underwriters may round the number of shares allocated to each Holder or other securities holder to the nearest 100 shares. If any Holder or other securities holder disapproves of the terms of any such underwriting, he or she may elect to withdraw therefrom by written notice to the Company or Pubco and the managing underwriter. Any securities excluded or withdrawn from such underwritten offering shall be withdrawn from such registration, and shall not be transferred in a public distribution without the prior written consent of the managing underwriter prior to one-hundred eighty (180) days after the effective date of the registration statement relating thereto.

(c) The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2 prior to the effectiveness of such registration, whether or not any Holder has elected to include securities in such registration.

Section 3. UNDERWRITTEN PUBLIC OFFERING.

The Company shall not cause, and shall ensure that Pubco does not cause, the registration under the Securities Act of any other shares of its common stock to become effective (other than registration of an employee stock plan, or registration in connection with any Securities Act Rule 145 or similar transaction) during the Effectiveness Period of a registration requested hereunder for an underwritten public offering if, in the judgment of the underwriter or underwriters, marketing factors would materially adversely affect the price of the Registrable Securities subject to such underwritten registration.

Section 4. OBLIGATIONS OF COMPANY

In addition to the obligations of the Company set forth in Section 2.1, and in no way in limitation of such obligations, whenever the Company or Pubco is required by the provisions of this Agreement to effect the registration of the Registrable Securities, the Company shall, or shall cause Pubco to: (i) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to make and to keep such registration statement effective during the Effectiveness Period, (ii) comply with the provisions of the Securities Act with respect to the sale or other disposition of all securities proposed to be registered in such registration statement for the Effectiveness Period; (iii) furnish to any Holder such number of copies of any prospectus (including any preliminary prospectus and any amended or supplemented prospectus), in conformity with the requirements of the Securities Act, as such Holder may reasonably request in order to effect the offering and sale of the Registrable Securities to be offered and sold; (iv) use its best efforts to register or qualify the Registrable Securities covered by such registration statement under the securities or blue sky laws of such states as the Holders shall reasonably request, maintain any such registration or qualification current for the Effectiveness Period, and take any and all other actions either necessary or reasonably advisable to enable Holders to consummate the public sale or other disposition of the Registrable Securities in jurisdictions where such Holders desire to effect such sales or other disposition; (v) take all such other actions either necessary or reasonably desirable to permit the Registrable Securities held by a Holder to be registered and disposed of in accordance with the method of disposition described herein; (vi) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering; (vii) notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing, such obligation to continue for the Effectiveness Period; (viii) cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange on which similar securities issued by the Company or Pubco are then listed; (ix) provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration; and (x) use its best efforts to furnish, at the request of any Holder requesting registration of Registrable Securities pursuant to Section 3, if such securities are being sold through underwriters, or if such securities are not being sold through underwriters, on the date that the registration statement with respect to such securities becomes effective, (A) an opinion, dated such date as such registration statement becomes effective, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters and to the Holders requesting registration of Registrable Securities and (B) a letter dated such date as such registration statement becomes effective, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering and reasonably satisfactory to the Holders of a majority of the Registrable Securities being registered, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities. Notwithstanding the foregoing, the Company shall not be required to register or to qualify an offering of the Registrable Securities under the laws of a state if as a condition to so doing the Company is required to qualify to do business or to file a general consent to service of process in any such state or jurisdiction, unless the Company is already subject to service in such jurisdiction.

SECTION 5 EXPENSES OF REGISTRATION AND RESTRICTIVE LEGEND REMOVAL

(a) The Company or Pubco shall pay all of the fees and expenses (exclusive of underwriting discounts and commission and stock transfer taxes) incurred by the Company or Pubco in complying with Sections 2, 3 and 4 hereof in connection with any registration statement that is initiated pursuant to this Agreement, including, without limitation, all SEC and blue sky registration and filing fees, printing expenses, transfer agent and registrar fees, the fees and disbursements of the Company's outside counsel, the reasonable fees and disbursements of one special counsel to the Holders (not to exceed $20,000), and the expense of any special audits (not to exceed $20,000) incident to or required by any such registration (the "Registration Expenses"). If a registration proceeding is begun upon the request of Holders pursuant to Sections 3 or 4 but such request is subsequently withdrawn, then the Holders of Registrable Securities to have been registered may either: (i) bear all Registration Expenses of such proceeding, pro rata on the basis of the number of shares to have been registered, in which case the Company shall be deemed not to have effected a registration pursuant to Sections 3 or 4, as applicable, of this Agreement; or (ii) require the Company to bear all Registration Expenses of such proceeding, in which case the Company shall be deemed to have effected a registration pursuant to Section 3 or 4, as applicable, of this Agreement. Notwithstanding the foregoing, however, if at the time of the withdrawal, the Holders have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request, then the Holders shall not be required to pay any of said Registration Expenses. In such case, the Company shall be deemed not to have effected a registration pursuant to Sections 3 or 4, as applicable, of this Agreement. Any underwriting discounts, fees and disbursements of any additional counsel to the Holders, selling commissions and stock transfer taxes applicable to the Registrable Securities registered on behalf of Holders shall be borne by the Holders of the Registrable Securities included in such registration. The expenses of any legal services or special audit required in connection with any registration, qualification or compliance pursuant to Section 3 or 4 in excess of twenty thousand dollars ($20,000) shall be borne pro rata by the Holders of Registrable Securities proposing to distribute such shares of Registrable Securities in such registration.

(b) Notwithstanding anything herein to the contrary, at the request of any Holder, the Company shall employ its counsel at the Company's expense to prepare any and all legal opinions necessary for the prompt removal of restrictive legends from certificates representing Registrable Securities as, when and to the extent such legends may be removed in compliance with the Securities Act and/or Rule 144.

SECTION 6 INDEMNIFICATION

6.1. The Company. To the extent permitted by law, the Company will, and shall cause Pubco to, indemnify Holders and each person controlling Holders within the meaning of Section 15 of the Securities Act, and each underwriter if any, of the Company's or Pubco's securities, with respect to any registration, qualification or compliance which has been effected pursuant to this Agreement, against all expenses, claims, losses, damages or liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation by the Company or Pubco of any rule or regulation promulgated under the Securities Act or Exchange Act or state securities law applicable to the Company or Pubco in connection with any such registration, qualification or compliance, and the Company or Pubco will reimburse Holders and each person controlling Holders, and each underwriter, if any, for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, provided that neither the Company nor Pubco will be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information expressly furnished to the Company or Pubco by such Holder or controlling person or underwriter seeking indemnification for use in connection with such registration by any such Holder, underwriter or controlling person.

6.2. Holders. To the extent permitted by law, each Holder shall, if Registrable Securities held by such Holder are included in the securities as to which such registration, qualification or compliance is being effected (the "Indemnifying Holder"), indemnify the Company and Pubco, each of their respective directors and officers and each person who controls the Company and Pubco within the meaning of Section 15 of the Securities Act, and each underwriter, if any, of the Company's or Pubco's securities with respect to any registration, qualification or compliance which has been effected pursuant to this Agreement, against all expenses, claims, losses, damages and liabilities (or actions in respect thereof), arising out of or based on any untrue statement (or alleged untrue statement) of a material fact made in reliance upon and in conformity with written information furnished to the Company or Pubco by such Indemnifying Holder contained in any such registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or any violation by such Indemnifying Holder of any rule or regulation promulgated under the Securities Act applicable to such Indemnifying Holder in connection with any such registration, qualification or compliance, and the Indemnifying Holder will reimburse the Company or Pubco, such directors and officers and each person controlling Company and each underwriter, if any, for any legal or any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, in reliance upon and in conformity with written information furnished to the Company by such Indemnifying Holder, provided that in no event shall any indemnity under this Section 6.2 exceed the net proceeds of the offering received by such Indemnifying Holder; provided, further, that the indemnity agreement contained in this Section 6.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Indemnifying Holder (which consent shall not be unreasonably withheld); provided further, however, that the indemnity agreement contained in this Section 6.2 with respect to any preliminary prospectus shall not inure to the benefit of any Holder or underwriter, or any person controlling such Holder or underwriter, from whom the person asserting any such losses, claims, damages or liabilities purchased shares in the offering, if a copy of the prospectus (as then amended or supplemented if the Company shall have furnished any amendments or supplements thereto) was not sent or given by or on behalf of such Holder or underwriter to such person, if required by law so to have been delivered, at or prior to the written confirmation of the sale of the shares to such person, and if the prospectus (as so amended or supplemented) would have cured the defect giving rise to such loss, claim, damage or liability.

6.3. Defense of Claims. Each party entitled to indemnification under this Section 6 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such party's expense; provided, however, that the Indemnifying Party shall pay such expense if representation of the Indemnified Party by counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between the Indemnified Party and any other party represented by such counsel in such proceeding, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 6 unless the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action. No Indemnifying Party, in the defense of any such claim or litigation shall, except with the written consent of each Indemnified Party which consent shall not be unreasonably withheld, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation. No Indemnifying Party shall be required to indemnify any Indemnified Party with respect to any settlement entered into without the Indemnifying Party's prior written consent.

6.4. Contribution. If the indemnification provided for in this Section 6 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any losses, claims, damages or liabilities referred to herein, the Indemnifying Party, in lieu of indemnifying such Indemnified Party thereunder, shall to the extent permitted by applicable law contribute to the amount paid or payable by such Indemnified Party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other, in connection with the violations that resulted in such loss, claim, damage or liability, as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by a court of law by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission; provided, that in no event shall any contribution by a Holder exceed the net proceeds from the offering received by such Holder.

6.5. Conflict; Survival. Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control. The obligations of the Company and Holders under Section 6 shall survive the completion of any offering of Registrable Securities in a registration statement.

SECTION 7 RULE 144 REPORTING

With a view to making available the benefits of certain rules and regulations of the SEC which may at any time permit the sale of the Registrable Securities to the public without registration, the Company agrees to, and agrees to cause Pubco to:

(a) Make and keep public information available, as those terms are understood and defined in Rule 144, at all times in accordance with the requirements of the Exchange Act from and after the effective date of the Reverse Merger;

(b) File with the SEC in a timely manner all reports and other documents required of the Company or Pubco under the Securities Act and the Exchange Act at any time after it has become subject to such reporting requirements; and

(c) So long as a Holder owns any Registrable Securities, furnish to such Holder forthwith upon request a written statement by the Company or Pubco as to its compliance with the current public information requirements of said Rule 144 and of the Exchange Act (at any time after it has become subject to such reporting requirements), a copy of the most recent annual or quarterly report of the Company or Pubco, and such other reports and documents of the Company or Pubco, and such other reports and documents so filed as a Holder may reasonably request in availing itself of any rule or regulation of the SEC allowing such Holder to sell any such securities without registration; and

(d) Take such action, including the voluntary registration of its common stock under Section 12 of the Exchange Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon as practicable after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective.

SECTION 8 STANDOFF AGREEMENT

Upon the effectiveness of any registration statement for the underwritten public offering of equity securities of the Company or Pubco, if requested by the Company or Pubco and the managing underwriter, each Holder agrees not to offer to sell or sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company or Pubco held by the Holder at any time during such period (other than those unregistered shares which are sold under Rule 144, if any), directly or indirectly, without the prior written consent of the Company, Pubco or the underwriters for such period of time following the effective date of the registration statement(not to exceed one-hundred eighty (180) days) as may be requested by the Company, Pubco and the managing underwriter, provided that the foregoing obligations shall apply only if all directors and executive officers of the Company and all other stockholders holding securities that, on an as converted or fully exercised basis, equate to greater than five percent (5%) of the issued and outstanding shares of Common Stock (or common stock of Pubco, as the case may be) and all other persons with registration rights (whether or not pursuant to this Agreement), enter into similar agreements. This Section 8 shall not apply to a registration relating solely to employee benefit plans, or to a registration relating solely to a transaction pursuant to Rule 145 under the Securities Act. In order to enforce the foregoing, the Company may impose stop-transfer instructions with respect to the Registrable Securities of each Holder (and the share or securities of every other person subject to the foregoing restrictions) until the end of such period.

From and after the date of this Agreement, the Company shall not, without the prior written consent of at least a majority of the outstanding Registrable Securities (the "Required Vote"), grant to future investors any registration rights on parity with or more favorable than the registration rights granted to the Holders hereunder.

SECTION 9 INDEMNIFICATION

The Company shall, and shall cause Pubco to, indemnify and hold harmless each Holder, each of their respective direct and indirect subsidiaries and Affiliates, and each of the respective partners, members, stockholders, equity holders, officers, directors, trustees and other fiduciaries, employees, agents, and representatives of any of the foregoing (collectively, referred to as the "***Indemnitees***" and individually as a "***Indemnitee***") from and against any and all Indemnifiable Losses resulting from, relating to or arising out of any claim or claims made against such Indemnitee in connection with any threatened, pending or completed action, suit, arbitration, investigation or other proceeding arising out of, or relating to the any Indemnitee's performance of its obligations or the exercise of any Indemnitee's rights in accordance with the terms of this Agreement, including actions taken in their capacity as directors or stockholders of the Company or Pubco; provided, however, that the Company and Pubco shall not be obligated to indemnify or hold harmless any Indemnitee under this Section 9 against any Indemnifiable Losses resulting from or arising out of any such action or claim if it has been adjudicated by a final and non-appealable determination of a court or other trier of fact of competent jurisdiction that such Indemnifiable Losses were the result of (a) a breach of such Indemnitee's fiduciary duty to the Company, (b) any action or omission made by the Indemnitee in bad faith, (c) any criminal action on the part of such Indemnitee or (d) such Indemnitee's willful misconduct.

The Company or Pubco shall reimburse, promptly following request therefor, all reasonable expenses incurred by an Indemnitee in connection with any threatened, pending or completed action, suit, arbitration, investigation or other proceeding arising out of, or relating to, the Indemnitees' actions in connection with any transaction undertaken in connection with this Agreement.

SECTION 10 CONFIDENTIALITY OF RECORDS

Each Holder agrees that it will keep confidential and not disclose, divulge or use for any purpose other than to evaluate and monitor its investment in the Company any confidential or proprietary information ("Confidential Information") which such party obtains from the Company pursuant to financial statements, reports and other information submitted by the Company to such party pursuant to this Agreement or the Purchase Agreement; *provided, however*, that the Investors may disclose Confidential Information (a) to their respective general partners, limited partners, members, stockholders, equity holders, Affiliates and any of the directors, officers and other representatives of any of the foregoing in accordance with their respective normal reporting practices, and to their respective attorneys, accountants, consultants and other professionals under an obligation of confidentiality and (b) to any prospective purchaser of any securities of the Company so long as such prospective purchaser is obligated not to disclose, divulge or use such Confidential Information to the same extent as the disclosing Investor. Each Holder shall use the same level of care with the Confidential Information that it uses with its own confidential information. "Confidential Information" shall not include the following: (i) information that is now in, or hereafter enters, the public domain through no fault of the Holder; (ii) information that previously was known by the Holder independently of the Company; (iii) information that is independently developed by the Holder without reference to Confidential Information; (iv) information that is disclosed with the written approval of the Company; or (v) information that is received from a third party without a duty of confidentiality. Notwithstanding the foregoing, no Holder shall be prohibited from disclosing Confidential Information that is required to be disclosed pursuant to any legal process or subpoena from any court, arbitrator, governmental body, official or authority or by applicable law; provided that the disclosing Holder takes reasonable steps to minimize the extent of such disclosure and provides the Company with reasonably prompt notice after becoming required to disclose such Confidential Information to afford the Company an opportunity to intervene and oppose such disclosure. This provision shall survive any termination of this Agreement. Notwithstanding anything herein to the contrary, this provision shall expire and become null and void and of no further force or effect upon the filing by Pubco of the so-called "super 8-K" under the Exchange Act following the closing of the Reverse Merger.

SECTION 11 MISCELLANEOUS

11.1 Governing Law.

This Agreement shall be governed by and construed under the laws of the State of New York, notwithstanding the conflicts of laws principles of the State of New York or any other jurisdiction. No suit, action or proceeding with respect to this Agreement may be brought in any court or before any similar authority other than in a court of competent jurisdiction in the State of New York and the parties hereby submit to the exclusive jurisdiction of such courts for the purpose of such suit, proceeding or judgment. Each of the parties hereto hereby irrevocably waives any right which it may have had to bring such an action in any other court, domestic or foreign, or before any similar domestic or foreign authority and agrees not to claim or plead the same. Each of the parties hereto hereby irrevocably and unconditionally waives trial by jury in any legal action or proceeding in relation to this Agreement and for any counterclaim therein.

11.2 Survival.

The representations, warranties, covenants, and agreements made herein shall survive any investigation made by any Holder and the closing of the transactions contemplated hereby. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company or Pubco, or their respective Subsidiaries or the Investors pursuant hereto in connection with the transactions contemplated hereby shall be deemed to be representations and warranties by the Company, Pubco or their respective Subsidiaries or the Investors, as applicable, hereunder solely as of the date of such certificate or instrument.

11.3 Successors and Assigns.

Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors and permitted assigns of the parties hereto and shall inure to the benefit of and be enforceable by each person who shall be a holder of Common Stock issued or issuable in the Offering from time to time; *provided, however*, that each such successor and permitted assign the transferee has agreed in writing to be bound by the terms of this Agreement as if such successor and permitted assign were an original Holder by executing the Counterpart.

11.4 Entire Agreement.

This Agreement constitutes the full and entire understanding and agreement between the parties hereto with regard to the subject matter hereof and thereof and no party hereto shall be liable or bound to any other party hereto in any manner by any representations, warranties, covenants and agreements except as specifically set forth herein and therein, with respect to the subject matter hereof.

11.5 Severability.

If any provision of the Agreement is held to be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

11.6 Amendment and Waiver.

Any provision of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company or Pubco and the Holders of a majority of the Registrable Securities then outstanding and any amendment or waiver so made shall be binding upon each Holder and the Company. In addition, any provision of this Agreement and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) by any party so waiving in writing, such waiver to be enforceable solely against such party.

112.7 Delays or Omissions.

No delay or omission to exercise any right, power, or remedy accruing to any party hereto, upon any breach, default or noncompliance of any party under this Agreement shall impair any such right, power, or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of any similar breach, default or noncompliance thereafter occurring. Any waiver, permit, consent, or approval of any kind or character on part of any party hereto of any breach, default or noncompliance under the Agreement or any waiver on such party's part of any provisions or conditions of this Agreement must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, by law, or otherwise afforded to the parties hereto, shall be cumulative and not alternative.

11.8 Notices.

All notices, requests, demands and other communications given or made in accordance with the provisions of this Agreement shall be addressed (i) if to a Holder, at such Holder's address, fax number or email address furnished on the signature pages hereof or such Holder's Counterpart hereto or as otherwise furnished to the Company or Pubco by the Holder in writing, or (ii) if to the Company or Pubco, to the attention of the President at such address, fax number or email address furnished on the signature page below or as otherwise furnished by the Company or Pubco in writing, and shall be made or sent by a personal delivery or overnight courier, by registered, certified or first class mail, postage prepaid, or by facsimile or electronic mail with confirmation of receipt, and shall be deemed to be given on the date of delivery when made by personal delivery or overnight courier, 48 hours after being deposited in the U.S. mail, or upon confirmation of receipt when sent by facsimile or electronic mail. Any party may, by written notice to the other, alter its address, number or respondent, and such notice shall be considered to have been given three (3) days after the overnight delivery, airmailing, faxing or sending via e-mail thereof.

11.9 Titles and Subtitles.

The titles of the sections and subsections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

12.10 Counterparts; Execution by Facsimile Signature.

This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. This Agreement may be executed by facsimile signature(s) which shall be binding on the party delivering same, to be followed by delivery of originally executed signature pages.

[*SIGNATURES ON FOLLOWING PAGES*]

IN WITNESS WHEREOF, the parties hereto have executed this 2012 Unit Investor Rights Agreement as of the date set forth in the first paragraph hereof.

COMPANY:

ACTINIUM PHARMACEUTICALS, INC.

By:_____
Name: Jack V. TalleyTitle: President and Chief Executive Officer

Address:

Tel: ( )
Fax: ( )
email: jtalley@actiniumpharmaceuticals.com

PLACEMENT AGENT:

LAIDLAW & COMPANY (UK) LTD.

BY:_____
NAME:
TITLE:

ADDRESS:

TEL:
FAX:
EMAIL:

[Signature Page to 2012 Unit Investor Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this 2012 Unit Investor Rights Agreement as of the date set forth in the first paragraph hereof.

ACTINIUM HOLDINGS LIMITED

By:_____
Name:
Title:

Address:
Actinium Holdings Limited
c/o Michael Sheffery, Ph.D
OrbiMed Advisors LLC
767 Third Avenue, 30th Floor
New York, NY 10017

with a copy to:

Shalom Leaf, Esq.
Shalom Leaf, PC
600 Madison Avenue, 22nd Floor
New York, NY 10022

LAIDLAW & COMPANY (UK) LTD.

BY:_____
NAME:
TITLE:

ADDRESS:

TEL:
FAX:
EMAIL:

The Investors listed on Exhibit A to the Agreement have executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Investor is deemed to have executed the 2012 UNIT INVESTOR RIGHTS AGREEMENT in all respects and is bound to the terms and conditions thereof as set forth in such Subscription Agreement.

Exhibit A
List of Investors

Exhibit B

Counterpart Signature Page
to
2012 Unit Investor Rights Agreement dated October __, 2012
for
Actinium Pharmaceuticals, Inc.

The undersigned hereby acknowledges receipt of a copy of that certain 2012 Unit Investor Rights Agreement, dated October __, 2012, among Actinium Pharmaceuticals, Inc., a Delaware corporation, Laidlaw & Company (UK) Ltd. and the Investors referred to therein and the undersigned (as hereafter amended from time to time, the "***Investor Rights Agreement***"), and hereby certifies to the other parties thereto that it has read and fully understands the Investor Rights Agreement, that it has had an opportunity to review and discuss the terms and conditions of the Investor Rights Agreement with its legal counsel and other advisors, and that it agrees to be bound by the terms and conditions of the Investor Agreement as if it were an original signatory thereto.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on this ____ day of _____, 20__.

INVESTOR:

The Investors listed on Exhibit A to the Agreement have executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Investor is deemed to have executed the 2012 UNIT INVESTOR RIGHTS AGREEMENT in all respects and is bound to the terms and conditions thereof as set forth in such Subscription Agreement.

EXHIBIT I

FORM OF FIRST AMENDED AND RESTATED STOCKHOLDERS AGREEMENT

FIRST AMENDED AND RESTATED STOCKHOLDERS AGREEMENT

AMONG
ACTINIUM PHARMACEUTICALS, INC.,
ACTINIUM HOLDINGS LIMITED (FORMERLY GENERAL ATLANTIC INVESTMENTS LIMITED),
N.V. ORGANON

AND

THE STOCKHOLDERS LISTED ON SCHEDULE A HERETO

Dated: October 5, 2011

AMENDED AND RESTATED STOCKHOLDERS AGREEMENT

AMENDED AND RESTATED STOCKHOLDERS AGREEMENT (this " Agreement"), dated October 5, 2011, among ACTINIUM PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), ACTINIUM HOLDINGS LIMITED (formerly named General Atlantic Investments Limited), a Bermuda corporation ("AHL"), N.V. ORGANON, a Netherlands corporation ("Organon" and together with AHL, the "Initial Investors") and the other stockholders of the Company listed on Schedule A hereto (collectively, the " Existing Stockholders"). The Initial Investors, the Existing Stockholders and any other stockholder of the Company who agrees in writing to become bound by the terms and conditions of this Agreement are herein referred to collectively as the "Stockholders" and each individually as a "Stockholder".

RECITALS

WHEREAS, the Company, Actinium Pharmaceuticals, Ltd., a Bermuda corporation (the " Actinium Bermuda"), and the Existing Stockholders are parties to that certain Stockholders Agreement dated as of June 30, 2000 (the "Prior Stockholders Agreement");

WHEREAS, on July 5, 2007, Actinium Bermuda merged with and into the Company, thereby causing the Company to succeed to all of the rights and obligations of Actinium Bermuda under the Prior Stockholders Agreement;

WHEREAS, pursuant to the Series E Preferred Stock Purchase Agreement, dated the date hereof (the "Preferred Stock Purchase Agreement"), among the Company and the investors listed in and executing the Preferred Stock Purchase Agreement (the "Series E Investors"), the Company proposes to issue and sell to such Series E Investors up to an aggregate of 27,586,203 shares, par value $.01 per share, of its Series E Preferred Stock (the "Series E Preferred Stock");

WHEREAS, each Stockholder owns the respective number of Shares (as hereinafter defined) of the Company (after giving effect to the transactions contemplated by the Preferred Stock Purchase Agreement) set forth opposite such Stockholder's name on Schedule A hereto;

WHEREAS, this Agreement is being entered into contemporaneously with, and as a condition to, the Series E Investors' consummation of the transactions contemplated by the Preferred Stock Purchase Agreement; and

WHEREAS, (a) AHL is the holder of a majority of the voting power of the "Shares" held by the " General Atlantic Stockholders" (as each such term is defined in the Stockholders Agreement) and (b) Organon and Dr. Maurits Geerlings, Jr. ("Geerlings") are the holders of a majority of the voting power of the "Shares" held by the "Major Stockholders" (as each such term is defined in the Stockholders Agreement); therefore, the Company, AHL, Organon and Geerlings together have the power and right to amend and restate the Stockholders Agreement pursuant to Section 8.3(b) thereof.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the meanings set forth below:

"AHL" has the meaning set forth in the introduction to this Agreement.

"Affiliate" means any Person who is an "affiliate" as defined in Rule 12b-2 of the General Rules and Regulations under the Exchange Act.

"Agreement" means this Agreement as the same may be amended, supplemented or modified in accordance with the terms hereof.

"Board of Directors" means the Board of Directors of the Company.

"Business Day" means any day other than a Saturday, Sunday or other day on which commercial banks in the State of New York are authorized or required by law or executive order to close.

"CEO Director" has the meaning set forth in Section 6.2(b)(ii) of this Agreement.

"Certificate" means the Fourth Amended and Restated Certificate of Incorporation of the Company as in effect on the date hereof, as the same may be amended, supplemented or modified.

"Charter Documents" means the Certificate and the By-laws of the Company as in effect on the date hereof, as the same may be amended, supplemented or modified.

"Code" means the Internal Revenue Code of 1986, as amended, or any successor statute thereto.

"Commission" means the Securities and Exchange Commission or any similar agency then having jurisdiction to enforce the Securities Act.

"Common Stock" means the Common Stock, par value $.01 per share, of the Company and any other common stock of the Company or any other capital stock into which such stock is reclassified or reconstituted, whether by way of recapitalization, merger, consolidation or other reorganization or otherwise.

"Common Stock Equivalents" means any security or obligation which is by its terms convertible into, or exercisable or exchangeable for, shares of Common Stock, including, without limitation the Preferred Stock, and any option, warrant or other subscription or purchase right with respect to Common Stock or any such convertible, exercisable or exchangeable security or obligation.

"Company" has the meaning set forth in the introduction to this Agreement.

"Company Option" has the meaning set forth in Section 3.1(b) of this Agreement.

"Company Option Period" has the meaning set forth in Section 3.1(b) of this Agreement.

"Designating Party" has the meaning set forth in Section 6.3(a) of this Agreement.

"Drag-Along Event" has the meaning set forth in Section 3.1(g)(i) of this Agreement.

"Drag-Along Notice" has the meaning set forth in Section 3.1(g)(ii) of this Agreement.

"Drag-Along Rights" has the meaning set forth in Section 3.1(g)(i) of this Agreement.

"Drag-Along Stockholders" has the meaning set forth in Section 3.1(g)(i) of this Agreement.

"Eligible Investor" means a Stockholder that is (i) a Series E Investor who or which, at the time in question, holds any of the issued and outstanding Series E Preferred Stock, (ii) an Initial Investor, or (iii) a Major Stockholder.

"Excess New Securities" has the meaning set forth in Section 4.2(a) of this Agreement.

"Excess Offered Securities" has the meaning set forth in Section 3.1(c)(i) of this Agreement.

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

"Exempt Issuances" has the meaning set forth in Section 4.1 of this Agreement.

"Existing Stockholders" has the meaning set forth in the introduction to this Agreement.

"Fair Value" has the meaning set forth in Section 3.2(b) of this Agreement.

"Family Members" has the meaning set forth in Section 2.2 of this Agreement.

"Governmental Authority" means the government of any nation, state, city, locality or other political subdivision thereof, any entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, and any corporation or other entity owned or controlled, through stock or capital ownership or otherwise, by any of the foregoing.

"Initial Investors" has the meaning set forth in the introduction to this Agreement.

"Investors" means the Initial Investors, the Series E Investors and any Transferees of any Initial Investor's Shares and any subsequent Transferees of any of such Shares, in any case to whom Shares are Transferred in accordance with Section 2.4 of this Agreement, and the term "Investor" shall mean any such Person.

"Involuntary Transfer" means any Transfer, proceeding or action by or in which a Stockholder shall be deprived or divested of any right, title or interest in or to any of the Shares, including, without limitation, (i) any seizure under levy of attachment or execution, (ii) any Transfer in connection with bankruptcy (whether pursuant to the filing of a voluntary or an involuntary petition under the United States Bankruptcy Code of 1978, or any modifications or revisions thereto) or other court proceeding to a debtor in possession, trustee in bankruptcy or receiver or other officer or agency, (iii) any Transfer to a state or to a public officer or agency pursuant to any statute pertaining to escheat or abandoned property, (iv) any Transfer pursuant to a divorce or separation agreement or a final decree of a court in a divorce action and (v) any Transfer resulting from the death of a Stockholder.

"Involuntary Transferee" has the meaning set forth in Section 3.2(a) of this Agreement.

"IPO Effectiveness Date" means the date upon which the Company closes its Qualified Initial Public Offering.

"Isotopia" means Isotopia B.V., a private limited company established under Netherlands law.

"Liens" means any mortgage, deed of trust, pledge, hypothecation, assignment, encumbrance, lien (statutory or other) or preference, priority, right or other security interest or preferential arrangement of any kind or nature whatsoever (excluding preferred stock and equity-related preferences).

"Major Stockholders" means Isotopia, Dr. Maurits W. Geerlings, Sr., Dr. Maurits W. Geerlings, Jr., Kenneth R. Givens, and any Permitted Transferee thereof to whom Shares are Transferred in accordance with Section 2.3 of this Agreement, and the term "Major Stockholder" shall mean any such Person.

"New Issuance Notice" has the meaning set forth in Section 4.1 of this Agreement.

"New Securities" has the meaning set forth in Section 4.1 of this Agreement.

"Organon" has the meaning set forth in the introduction to this Agreement.

"Offer Price" has the meaning set forth in Section 3.1(a) of this Agreement.

"Offered Securities" has the meaning set forth in Section 3.1(a) of this Agreement.

"Offering Notice" has the meaning set forth in Section 3.1(a) of this Agreement.

"Permitted Transferee" has the meaning set forth in Section 2.2 of this Agreement.

"Person" means any individual, firm, corporation, partnership, trust, incorporated or unincorporated association, joint venture, joint stock company, limited liability company, Governmental Authority or other entity of any kind, and shall include any successor (by merger or otherwise) of such entity.

"Preemptive Rightholder(s)" has the meaning set forth in Section 4.1 of this Agreement.

"Preferred Stock" means collectively the shares of Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock.

"Preferred Stock Purchase Agreement" has the meaning set forth in the Recitals to this Agreement.

"Price Negotiation Period" has the meaning set forth in Section 3.2(a) of this Agreement.

"Prior Stockholders Agreement" has the meaning set forth in the Recitals of this Agreement.

"Proportionate Percentage" has the meaning set forth in Section 4.2(a) of this Agreement.

"Proposed Price" has the meaning set forth in Section 4.1 of this Agreement.

"Pubco Transaction" means (i) a reverse merger or similar transaction between the Company and a corporation whose securities are publicly traded in the U.S. or other mutually agreed upon jurisdiction("**Pubco**"), or (ii) the quotation (a "**Public Quotation**") of the Company's securities for purchase and sale on a U.S. quotation service (iii) any filing with an applicable regulatory body which will result in the Company becoming an entity whose securities are traded on a public exchange in the U.S. or other mutually agreed upon jurisdiction (any of the foregoing, a "**Pubco Transaction**").

"Qualified Initial Public Offering**"** means the closing of the Company's initial direct public offering or underwritten public offering on a reasonable efforts basis pursuant to an effective registration statement filed pursuant to the Securities Act, covering the offer and sale of the Company's Common Stock for the account of the Company (a) in which (i) the Company actually receives gross proceeds equal to or greater than $5,000,000, calculated before deducting underwriters' discounts and commissions and other offering expenses, and (ii) a per share offering price equal to or greater than the product of (A) the Applicable Per Share Stated Value, as such term is defined in the Certificate, of the Series E Preferred Stock, multiplied by (B) two (2), and (b) following which the Company's Common Stock is listed on a national securities exchange or approved for quotation on a Nasdaq Market.

"Rightholder(s)" has the respective meanings set forth in Sections 3.1(c)(i) and 3.2(a) of this Agreement.

"Rightholder Option Period" has the meaning set forth in Section 3.1(c)(i) of this Agreement.

"Sale Majority" has the meaning set forth in Section 3.1(g)(i) of this Agreement.

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

"Selling Stockholder" has the meaning set forth in Section 3.1(a) of this Agreement.

"Series A Preferred Stock " means the Company's Series A Convertible Participating Preferred Stock, par value $0.01 per share.

"Series B Preferred Stock" means the Company's Series B Preferred Stock, par value $0.01 per share.

"Series C Preferred Stock" means any series of the Company's Series C-1 Preferred Stock, par value $0.01 per share, Series C-2 Preferred Stock, par value $0.01 per share, Series C-3 Preferred Stock, par value $0.01 per share, and Series C-4 Preferred Stock, par value $0.01 per share, collectively.

"Series D Preferred Stock" means the Company's Series D Preferred Stock, par value $0.01 per share.

"Series E Investor" means an Investor who owns any shares of Series E Preferred Stock.

"Series E Preferred Directors" has the meaning set forth in Section 6.2(b)(i) of this Agreement.

"Series E Preferred Stock" has the meaning set forth in the Recitals to this Agreement.

"Shares" means, with respect to each Stockholder, all shares, whether now owned or hereafter acquired, of Common Stock and Preferred Stock, owned by such Stockholder; provided, however, for the purposes of any computation of the number of "Shares" owned by any Stockholder pursuant to the definition of "Eligible Investor" and any of Sections 2, 3, 4.1, 4.2, 6 and 8.3, all outstanding Common Stock Equivalents owned by any Stockholder shall be deemed converted, exercised or exchanged as applicable and the shares of Common Stock issuable upon such conversion, exercise or exchange shall be deemed outstanding and owned by such Stockholder, whether or not such conversion, exercise or exchange has actually been effected.

"Stock Option Plan" means any stock option plan of the Company pursuant to which Common Stock or options to purchase shares of Common Stock in such amounts as are determined from time to time by the Board of Directors in its discretion are reserved and available for grant to officers, directors, employees and consultants of the Company and its subsidiaries.

"Stockholders" has the meaning set forth in the Recitals to this Agreement.

"Stockholders Agreement" has the meaning set forth in the Recitals to this Agreement.

"Stockholders Meeting" has the meaning set forth in Section 6.1 of this Agreement.

"Subject Purchaser" has the meaning set forth in Section 4.1 of this Agreement.

"Tag-Along Rightholder" has the meaning set forth in Section 3.1(f)(i) of this Agreement.

"Third-Party Purchaser" means any Person to whom any Stockholder wishes to Transfer all or any portion of its or his Shares other than a Person which is a Permitted Transferee of such Stockholder.

"Transfer" has the meaning set forth in Section 2.1 of this Agreement.

"Transferred Shares" has the meaning set forth in Section 3.2(a) of this Agreement.

"Transferring Stockholder" has the meaning set forth in Section 3.1(f)(i) of this Agreement.

"Written Consent" has the meaning set forth in Section 6.1 of this Agreement.

2. Restrictions on Transfer of Shares.

2.1 Limitation on Transfer. No Stockholder shall sell, give, assign, hypothecate, pledge, encumber, grant a security interest in or otherwise dispose of (whether by operation of law or otherwise) (each a "Transfer") any Shares or any right, title or interest therein or thereto, except in accordance with the provisions of this Agreement, including, without limitation, Section 2.4. Any attempt to Transfer any Shares or any rights thereunder in violation of the preceding sentence shall be null and void *abinitio*.

2.2 Permitted Transfers. Notwithstanding anything to the contrary contained in this Agreement, but subject to Sections 2.1, 2.3 and 2.4, at any time: (a) each of the Major Stockholders who is an individual may Transfer all or a portion of his Shares to or among (i) a member of such Major Stockholder's immediate family, which shall include his spouse, siblings, children or grandchildren ("Family Members") or (ii) a trust, corporation, partnership, limited liability company, or other legal entity, all of the beneficial interests in which shall be held by such Major Stockholder or one or more Family Members of such Major Stockholder; provided, however, that during the period that any such trust, corporation, partnership, limited liability company, or other legal entity holds any right, title or interest in any Shares, no Person other than such Major Stockholder or one or more Family Members of such Major Stockholder may be or may become beneficiaries, stockholders, limited or general partners or members thereof; (b) each of the Investors may Transfer all or a portion of his Shares to any of its Affiliates, to any other Investor or to any Affiliate of any other Investor; (c) Isotopia may Transfer all or a portion of its Shares to Dr. Maurits W. Geerlings, Sr., or any of his Family Members; and (d) Maurits Geerlings, Sr. may Transfer up to 17,500 of his Shares (subject to appropriate and proportionate adjustment for stock dividends payable in shares of, stock splits and other subdivisions and combinations of, and recapitalizations and like occurrences with respect to, the Common Stock) to a non-Family Member if and to the extent he has not already Transferred such number of Shares prior to the date hereof (the Persons referred to in the preceding clauses (a), (b) and (c) are each referred to hereinafter as a "Permitted Transferee"). A Permitted Transferee of Shares pursuant to this Section 2.2 may Transfer its Shares pursuant to this Section 2.2 only to the Transferor Stockholder or to a Person that is a Permitted Transferee of such Transferor Stockholder.

2.3 Permitted Transfer Procedures. If any Stockholder wishes to Transfer Shares to a Permitted Transferee under Section 2.2, such Stockholder shall give notice to the Company of its intention to make any Transfer permitted under Section 2.2 not less than ten (10) days prior to effecting such Transfer, which notice shall state the name and address of each Permitted Transferee to whom such Transfer is proposed, the relationship of such Permitted Transferee to such Stockholder, and the number of Shares proposed to be Transferred to such Permitted Transferee.

2.4 Transfers in Compliance with Law; Substitution of Transferee. Notwithstanding any other provision of this Agreement, no Transfer may be made unless (a) the Transferee has agreed in writing to be bound by the terms and conditions of this Agreement pursuant to an instrument substantially in the form attached hereto as Exhibit A, (b) the

Transfer complies in all respects with the applicable provisions of this Agreement and (c) the Transfer complies in all respects with applicable federal and state securities laws, including, without limitation, the Securities Act. If requested by the Company, an opinion of counsel to such Transferring Stockholder shall be supplied to the Company at such Transferring Stockholder's expense, to the effect that such Transfer complies with the applicable federal and state securities laws; provided, that no opinion of counsel shall be required for any Transfer by any Investor to any Permitted Transferee of such Investor. Upon becoming a party to this Agreement, (i) a Permitted Transferee of a Major Stockholder shall be substituted for, and shall enjoy the same rights and be subject to the same obligations as, the Transferring Major Stockholder hereunder with respect to the Shares Transferred to such Permitted Transferee, (ii) a Transferee of an Investor shall be substituted for, and shall enjoy the same rights and be subject to the same obligations as, the Transferring Investor hereunder with respect to the Shares Transferred to such Transferee, (iii) a Transferee other than a Permitted Transferee of a Major Stockholder shall be subject to the same obligations as, but none of the rights of, the Transferring Major Stockholder hereunder with respect to the Shares Transferred to such Transferee, and (iv) a Transferee of any Stockholder (other than a Stockholder which is a Major Stockholder or an Investor) shall be substituted for, and shall be entitled to the same obligations as, the Transferring Stockholder hereunder with respect to the Shares Transferred to such Transferee.

3. Right of First Refusal, Drag-Along and Tag-Along Rights.

3.1 Proposed Voluntary Transfers.

(a) Offering Notice. Subject to Section 2, if any Stockholder, other than a Series E Investor as to Shares of Series E Preferred Stock, (a "Selling Stockholder") wishes to Transfer all or any portion of its or his Shares, to any Third-Party Purchaser, such Selling Stockholder shall offer such Shares first to the Company by sending written notice (an "Offering Notice") to the Company, which shall state: (a) the name and address of the Third-Party Purchaser; (b) the number of Shares proposed to be Transferred (the "Offered Securities"); (c) the proposed purchase price per Share for the Offered Securities (the "Offer Price") and the type of consideration offered (including, if the consideration consists in whole or in part of non-cash consideration, such information available to the Selling Stockholder as is necessary for the Company and the Rightholders (as hereinafter defined) under this Section 3.1 to analyze the economic value and investment risk of such non-cash consideration); and (d) the other terms and conditions of such sale. Upon delivery of the Offering Notice, such offer shall be irrevocable unless and until the rights of first offer provided for herein shall have been waived or shall have expired. The Company shall promptly deliver a copy of the Offering Notice to each of the Rightholders under this Section 3.1. The Offering Notice shall include a copy of the agreement between the Selling Stockholder and the Third-Party Purchaser pertaining to the proposed Transfer of the Offered Securities to the Third-Party Purchaser.

(b) Company Option; Exercise. For a period of fifteen (15) days after the giving of the Offering Notice pursuant to Section 3.1(a) (the "Company Option Period"), the Company shall have the right (the "Company Option") but not the obligation to purchase any or all of the Offered Securities at a purchase price per share equal to the Offer Price and upon the terms and conditions set forth in the Offering Notice, except that the Company may, at its option, substitute cash consideration for non-cash consideration (other than notes) based upon the value of such non-cash consideration (as determined in good faith by a majority of the entire Board of Directors, which determination must include the Series E Preferred Directors). The right of the Company to purchase any or all of the Offered Securities under this Section 3.1(b) shall be exercisable by delivering written notice of the exercise thereof, prior to the expiration of the Company Option Period, to the Selling Stockholder, with a copy to the Eligible Investors and the Major Stockholders, which notice shall state the number of Offered Securities, respectively, proposed to be purchased by the Company. The failure of the Company to respond within the Company Option Period shall be deemed to be a waiver of the Company Option, provided that the Company may waive its rights under this Section 3.1(b) prior to the expiration of the Company Option Period by giving written notice to the Selling Stockholder, with a copy to the Eligible Investors and the Major Stockholders.

(c) Rightholder Option; Exercise.

(i) If the Company does not elect to purchase all of the Offered Securities, then for a period of thirty (30) days after the earlier to occur of (a) the expiration of the Company Option Period and (b) the date upon which the Selling Stockholder shall have received written notice from the Company of its exercise of the Company Option pursuant to Section 3.1(b) or its waiver thereof (the "Rightholder Option Period"), each of the Eligible Investors and those of the Major Stockholders who is not a Selling Stockholder (for the purpose of Section 3.1, (each, a "Rightholder" and collectively, the "Rightholders") shall have the right to purchase all, but not less than all, of the remaining Offered Securities at a per share purchase price equal to the Offer Price and upon the terms and conditions set forth in the Offering Notice, except that each Rightholder may, at its option, substitute cash consideration for non-cash consideration (other than notes) based upon the value of such non-cash consideration (as determined in good faith by a majority of the entire Board of Directors, which determination must include the Series E Preferred Directors). Each such Rightholder shall have the right to purchase that percentage of the Offered Securities determined by dividing (i) the total number of Shares then owned by such Rightholder by (ii) the total number of Shares then owned by all such Rightholders. If any Rightholder does not fully subscribe for the number or amount of Offered Securities it or he is entitled to purchase, then each other fully participating Rightholder shall have the right to purchase that percentage of the Offered Securities not so subscribed for (for the purposes of this Section 3.1(c), the "Excess Offered Securities") determined by dividing (x) the total number of Shares then owned by such fully participating Rightholder by (y) the total number of Shares then owned by all fully participating Rightholders who elected to purchase Excess Offered Securities. The procedure described in the preceding sentence shall be repeated until there are no remaining Excess Offered Securities. If the Company and/or the Rightholders do not purchase all of the Offered Securities pursuant to Section 3.1(b) and/or Section 3.1(c), then the Selling Stockholder may, subject to Section 3.1(f), sell the Offered Securities to a Third-Party Purchaser in accordance with Section 3.1(e).

(ii) The right of each Rightholder to purchase all of the remaining Offered Securities under subsection (i) above shall be exercisable by delivering written notice of the exercise thereof, prior to the expiration of the Rightholder Option Period, to the Selling Stockholder with a copy to the Company. Each such notice shall state (a) the number of Shares held by such Rightholder and (b) the number of Shares that such Rightholder is willing to purchase pursuant to this Section 3.1(c). The failure of a Rightholder to respond within the Rightholder Option Period to the Selling Stockholder shall be deemed to be a waiver of such Rightholder's rights under subsection (i) above, providedthat each Rightholder may waive its rights under subsection (ii) above prior to the expiration of the Rightholder Option Period by giving written notice to the Selling Stockholder, with a copy to the Company.

(d) Closing. The closing of the purchases of Offered Securities subscribed for by the Company under Section 3.1(b) and/or the Rightholders under Section 3.1(c) shall be held at the executive offices of the Company at 11:00 a.m., local time, on the 60th day after the giving of the Offering Notice pursuant to Section 3.1(a) or at such other time and place as the parties to the transaction may agree. At such closing, the Selling Stockholder shall deliver certificates representing the Offered Securities, duly endorsed for Transfer and accompanied by all requisite Transfer taxes, if any, and such Offered Securities shall be free and clear of any Liens (other than those arising hereunder and those attributable to actions by the purchasers thereof) and the Selling Stockholder shall so represent and warrant, and shall further represent and warrant that it is the sole beneficial and record owner of such Offered Securities. The Company and/or each Rightholder, as the case may be, purchasing Offered Securities shall deliver at the closing consideration to be paid in full and the cash portion of such consideration shall be paid in immediately available funds for the Offered Securities purchased by it or him. At such closing, all of the parties to the transaction shall execute such additional documents as are otherwise necessary or appropriate.

(e) Sale to the Third-Party Purchaser. Unless the Company and/or the Rightholders elect to purchase all, but not less than all, of the Offered Securities under Sections 3.1(b) and 3.1(c), the Selling Stockholder may, subject to Section 3.1(f), sell all, but not less than all, the Offered Securities to the Third-Party Purchaser and not to any assignee or designee of such Third-Party Purchaser at a purchase price per share equal to the Offer Price and on the terms and conditions set forth in the Offering Notice; provided, however, that such sale is bona fide and consummated within sixty (60) days after the earlier to occur of (i) the waiver by the Company and all of the Rightholders of their options to purchase the Offered Securities and (ii) the expiration of the Rightholder Option Period; and providedfurther, that such sale shall not be consummated unless and until (x) such Third-Party Purchaser shall represent in writing to the Company and each Rightholder that it is aware of the rights of the Company and the Stockholders contained in this Agreement and (y) prior to the purchase by such Third-Party Purchaser of any of such Offered Securities, such Third-Party Purchaser shall become a party to this Agreement and shall agree to be bound by the terms and conditions hereof in accordance with Section 2.4 hereof. If such sale is not consummated within such sixty (60) day period for any reason, then the restrictions provided for herein shall again become effective, and no Transfer of such Offered Securities may be made thereafter by the Selling Stockholder without again offering the same to the Company and the Rightholders in accordance with this Section 3.1.

(f) Tag-Along Rights.

(i) If any Stockholder (a "Transferring Stockholder") wishes to Transfer all or any portion of its or his Shares to a Third-Party Purchaser, then each of the Stockholders (other than the Transferring Stockholder) (each, a "Tag-Along Rightholder") shall have the right to sell to such Third-Party Purchaser, upon the same terms and conditions as the Transferring Stockholder, up to that number of Shares held by such Tag-Along Rightholder equal to that percentage of the number of Shares proposed to be Transferred by the Transferring Stockholder determined by dividing (i) the total number of Shares then owned by such Tag-Along Rightholder by (ii) the sum of (x) the total number of Shares then owned by all such Tag-Along Rightholders exercising their rights pursuant to this Section 3.1(f) and (y) the total number of Shares then owned by the Transferring Stockholder. To the extent that the Tag-Along Rightholders exercise their rights pursuant to this Section 3.1(f), the number of Shares proposed to be Transferred by the Transferring Stockholder shall be reduced accordingly.

(ii) The Transferring Stockholder shall give written notice to each Tag-Along Rightholder of each proposed sale by it of Shares which gives rise to the rights of the Tag-Along Rightholders set forth in this Section 3.1(f) at least fifteen (15) days prior to the proposed consummation of such sale, setting forth the name of such Transferring Stockholder, the number of Shares proposed to be sold, the name and address of the proposed Third-Party Purchaser, the proposed amount and form of consideration and terms and conditions of payment offered by such Third-Party Purchaser, the percentage of Shares that such Tag-Along Rightholder may sell to such Third-Party Purchaser (determined in accordance with Section 3.1(f)(i)), and a representation that such Third-Party Purchaser has been informed of the "tag-along" rights provided for in this Section 3.1(f) and has agreed to purchase Shares in accordance with the terms hereof. The tag-along rights provided by this Section 3.1(f) must be exercised by any Tag-Along Rightholder wishing to sell Shares pursuant to this Section 3.1(f) within ten (10) days following receipt of the notice required by the preceding sentence, by delivery of a written notice to the Transferring Stockholder indicating such Tag-Along Rightholder's wish to exercise its rights and specifying the number of Shares (up to the maximum number of Shares owned by such Tag-Along Rightholder required to be purchased by such Third-Party Purchaser) it wishes to sell. The failure of a Tag-Along Rightholder to respond within such 10-day period shall be deemed to be a waiver of such Tag-Along Rightholder's rights under this Section 3.1(f), provided that any Tag-Along Rightholder may waive its rights under this Section 3.1(f) prior to the expiration of such 10-day period by giving written notice to the Transferring Stockholder, with a copy to the Company. If a Third-Party Purchaser fails to purchase Shares from any Tag-Along Rightholder that has properly exercised its tag-along rights pursuant to this Section 3.1(f)(ii), then the Transferring Stockholder shall not be permitted to consummate the proposed sale of his or its Shares unless and until, simultaneous with such sale, the Transferring Stockholder purchases from such Tag-Along Rightholder the number of Shares such Tag-Along Rightholder is entitled to sell under this Section 3.1(f) on the same terms and conditions as the Transferring Stockholder is Transferring his or its Shares to the Third-Party Purchaser.

(g) Drag-Along Rights.

(i) If the Stockholders holding a majority of the voting power of the Shares (the "Sale Majority") approve a bona fide sale or exchange, whether directly or pursuant to a sale, merger, consolidation or other business combination, of all or substantially all of the Shares to a Third-Party Purchaser (a "Drag-Along Event"), then the Stockholders comprising a part of the Sale Majority shall have the right, subject to all of the provisions of this Section 3.1(g) ("Drag-Along Rights"), to require all of the other Stockholders (the "Drag-Along Stockholders" and each individually a "Drag-Along Stockholder") to (A) if such Drag-Along Event is structured as a sale of Shares, sell, Transfer and deliver or cause to be sold, Transferred and delivered to such Third-Party Purchaser all Shares and Common Stock Equivalents owned by the Drag-Along Stockholders or (B) if such Drag-Along Event is structured as a merger, consolidation or other business combination requiring the consent or approval of the Drag-Along Stockholders, vote their Shares in accordance with the written instructions of the Stockholders comprising a part of the Sale Majority in favor thereof, and otherwise consent to and raise no objection to such transaction, and waive any dissenters' rights, appraisal rights or similar rights which the Drag-Along Stockholders may have in connection therewith; and, in any such event, subject to the provisions of subsection (iii) of this Section 3.1(g), the Drag-Along Stockholders shall agree to and shall be bound by the same terms, provisions and conditions in respect of the Drag-Along Event. The provisions of Section 3.1(f) shall not apply to any transaction to which this Section 3.1(g) applies to the extent the Stockholders comprising a part of the Sale Majority shall have in fact exercised their Drag-Along Rights under this Section 3.1(g).

(ii) If the Stockholders comprising a part of the Sale Majority desire to exercise their Drag-Along Rights, they shall give written notice to the Drag-Along Stockholders ("Drag-Along Notice") of the Drag-Along Event which gives rise to the obligations of the Drag-Along Stockholders set forth in this Section 3.1(g), at least thirty (30) days prior to the proposed consummation of the transaction. The Drag-Along Notice shall set forth (A) the name and address of the Third-Party Purchaser, (B) the date on which such transaction is proposed to be consummated, (C) the proposed amount and form of consideration and terms and conditions of payment offered by the Third-Party Purchaser and (D) a representation that the Third-Party Purchaser has been informed of the Drag-Along Rights provided for in this Section 3.1(g) and has agreed to purchase Shares in accordance with the terms hereof.

(iii) In connection with a Drag-Along Event pursuant to this Section 3.1(g), the Drag-Along Stockholders shall make substantially the same representations, warranties, covenants and indemnities and other similar agreements as the Stockholders comprising a part of the Sale Majority agree to make in connection with the proposed Transfer by them relating to the ownership of and title to their Shares. No Drag-Along Stockholder shall be subject to the requirements of this Section 3.1(g) with respect to a Drag-Along Event if such Drag-Along Event (A) requires that the payment with respect to each share of Common Stock or Preferred Stock, as applicable, held by such Drag-Along Stockholder is not in accordance with the Certificate if such Drag-Along Event were deemed a "Liquidation" or "Acquisition Transaction" for purposes of Article IV, Section 3 thereof (or such equivalent Article and Section thereof), (B) provides that such Drag-Along Stockholder will not receive the same form of consideration or the same per share consideration for their shares of Common Stock or Preferred Stock, as applicable, as all other holders of such shares of Common Stock or Preferred Stock, as applicable, or (C) requires such Drag-Along Stockholder to agree to any indemnification obligations which (1) are for breaches of representations and warranties of any Person other than the Company or such Drag-Along Stockholder, (2) provide for indemnification other than in proportion to such Drag-Along Stockholder's ownership interest in the Company, determined on a fully-diluted basis as-converted to Common Stock basis (excluding: (a) all Shares issuable pursuant to the exercise of an option wherein such right of exercise has not yet vested as of the closing of the Drag-Along Event, (b) all Shares exercisable pursuant to either a warrant or an option for which the exercise price is greater than the fair market value of the underlying Shares as of the closing of the Drag-Along Event; and (c) all options and Shares reserved for the issuance of options under the Stock Option Plan for which options have not yet issued as of the closing of the Drag-Along Event), and (3) are not limited to the value of the consideration actually received by such Drag-Along Stockholder pursuant to such Drag-Along Event (excluding liability for such Drag-Along Stockholder's own fraud or malfeasance). In addition and without limitation to the foregoing, no Drag-Along Stockholder shall be subject to the requirements of this Section 3.1(g) with respect to a Drag-Along Event if such Drag-Along Stockholder is required to provide indemnification in connection with such Drag-Along Event and any of the Stockholders comprising a part of the Sale Majority are not required to provide indemnification or such Drag-Along Stockholder's indemnification obligations in connection with such Drag-Along Event are upon terms and conditions which are less favorable to such Drag-Along Stockholder than the terms and conditions upon which any of the Stockholders comprising a part of the Sale Majority are obligated to provide indemnification in connection with such Drag-Along Event.

3.2 Involuntary Transfers.

(a) Rights of First Offer upon Involuntary Transfer. If an Involuntary Transfer of any Shares (the "Transferred Shares") owned by any Stockholder other than an Eligible Investor shall occur, then the Company and the Stockholders other than the Stockholder who suffered or will suffer such Involuntary Transfer (for the purpose of Section 3.2, each, a "Rightholder" and collectively, the "Rightholders") shall have the same rights as specified in Sections 3.1(b) and 3.1(c), respectively, with respect to such Transferred Shares as if the Involuntary Transfer had been a proposed voluntary Transfer by a Selling Stockholder and shall be governed by Section 3.1 except that (i) the time periods shall run from the date of receipt by the Company of actual notice of the Involuntary Transfer (and the Company shall immediately give notice to the Rightholders of the date of receipt of such notice), (ii) such rights shall be exercised by notice to the Transferee of such Transferred Shares (the "InvoluntaryTransferee") rather than to the Stockholder who suffered or will suffer the Involuntary Transfer and (iii) the purchase price per Transferred Share shall be agreed upon by the Involuntary Transferee and the Company and/or the purchasing Rightholders purchasing a majority of the Transferred Shares, as the case may be; provided, however, that if such parties fail to agree as to such per share purchase price within thirty (30) days after the date on which the Company or the last of the Rightholders exercised its rights under this Section 3.2(a), whichever is later (such period, the "Price Negotiation Period"), the per share purchase price shall be the Fair Value thereof as determined in accordance with Section 3.2(b).

(b) Fair Value. If the parties fail to agree upon the per share purchase price of the Transferred Shares in accordance with Section 3.2(a) hereof, then the Company or the Rightholders, as the case may be, shall purchase the Transferred Shares at a per share purchase price equal to the Fair Value (as hereinafter defined) thereof. The Fair Value of the Transferred Shares shall be determined by a panel of three independent appraisers, which shall be nationally recognized investment banking firms or nationally recognized experts experienced in the valuation of corporations engaged in the business conducted by the Company. Within five (5) Business Days after the last day of the Price Negotiation Period or such earlier date as the applicable parties determine that they cannot agree as to the per share purchase price, the Involuntary Transferee and the Board of Directors (in the case of a purchase by the Company), or the purchasing Rightholders purchasing a majority of the Transferred Shares being purchased by the purchasing Rightholders (if the Company is not purchasing any Transferred Shares), or the Board of Directors and such purchasing Rightholders jointly (in the case of a purchase by the Company and Rightholders), as the case may be, shall each designate one such appraiser that is willing and able to conduct such determination. If either the Involuntary Transferee or the Board of Directors or the purchasing Rightholders or both, as the case may be, fails to make such designation within such period, then the other party that has made the designation shall have the right to make the designation on its behalf. The two appraisers designated shall, within a period of five (5) Business Days after the designation of the second appraiser, designate a mutually acceptable third appraiser. The three appraisers shall conduct their determination as promptly as practicable, and the Fair Value of the Transferred Shares shall be the average of the determination of the two appraisers that are closer to each other than to the determination of the third appraiser, which third determination shall be discarded; provided, however, that if the determination of two appraisers are equally close to the determination of the third appraiser, then the Fair Value of the Transferred Shares shall be the average of the determination of all three appraisers. Such determination shall be final and binding on the Involuntary Transferee, the Company and the Rightholders. The Involuntary Transferee shall be responsible for the fees and expenses of the appraiser designated by or on behalf of it, and the Company or the purchasing Rightholders (if both the Company and the purchasing Rightholders), or the purchasing Rightholders (if the Company is not purchasing any Transferred Shares) for the fees and expenses of the appraiser designated by or on behalf of the Board of Directors or the purchasing Rightholders (if the Company is not purchasing any Transferred Shares), as the case may be. The Involuntary Transferee and the Company or the purchasing Rightholders, as the case may be, shall each share half the fees and expenses of the appraiser designated by the appraisers. For purposes of this Section 3.2(b), the "Fair Value" of the Transferred Shares means the per share fair market value of such Transferred Shares determined in accordance with this Section 3.2(b) based upon all considerations that the appraisers determine to be relevant. All expenses to be shared by the Company and the purchasing Rightholders, or among the purchasing Rightholders (if the Company is not purchasing any Transferred Shares), shall be shared in proportion to the number of Transferred Shares purchased.

(c) Closing. The closing of any purchase under this Section 3.2 shall be held at the offices of the Company's legal counsel or such other location as may be designated by the Company at 11:00 a.m., local time, on the earlier to occur of (i) the fifth Business Day after the purchase price per Transferred Share shall have been agreed upon by the Involuntary Transferee and the Company or the purchasing Rightholders, as the case may be, in accordance with Section 3.2(a)(iii), or (ii) the fifth Business Day after the determination of the Fair Value of the Transferred Shares in accordance with Section 3.2(b), or at such other time and place as the parties to the transaction may agree. At such closing, the Involuntary Transferee shall deliver certificates, if applicable, or other instruments or documents representing the Transferred Shares being purchased under this Section 3.2, duly endorsed with a signature guarantee for Transfer and accompanied by all requisite Transfer taxes, if any, and such Transferred Shares shall be free and clear of any Liens (other than those arising hereunder) arising through the action or inaction of the Involuntary Transferee and the Involuntary Transferee shall so represent and warrant, and further represent and warrant that it is the beneficial owner of such Transferred Shares. The Company or each Rightholder, as the case may be, purchasing such Transferred Shares shall deliver at closing payment in full in immediately available funds for such Transferred Shares. At such closing, all parties to the transaction shall execute such additional documents as are otherwise necessary or appropriate.

(d) General. In the event that the provisions of this Section 3.2 shall be held to be unenforceable with respect to any particular Involuntary Transfer, the Company and the Rightholders shall have the rights specified in Sections 3.1(b) and 3.1(c), respectively, with respect to any Transfer by an Involuntary Transferee of such Shares, and each Rightholder agrees that any Involuntary Transfer shall be subject to such rights, in which case the Involuntary Transferee shall be deemed to be the Selling Stockholder for purposes of Section 3.1 of this Agreement and shall be bound by the provisions of Section 3.1 and other related provisions of this Agreement.

4. Future Issuance of Shares; Preemptive Rights.

4.1 Offering Notice. Except for the issuance of (a) any Excluded Securities of any kind described in clauses (A) through (F) of Section C.5.3(a)(vii) of Article IV of the Certificate, (b) any of the Series E Preferred Stock issued pursuant to the Preferred Stock Purchase Agreement, or (c) any shares of Common Stock issued pursuant to any Extraordinary Event (as defined in the Certificate) (such issuances described in (a) through (c) of this Section 4.1 being referred to collectively as "Exempt Issuances"), if the Company wishes to issue any capital stock or any other securities or obligations convertible into, or exercisable or exchangeable for, any capital stock of the Company or any option, warrant or other subscription or purchase right with respect to any capital stock of the Company or any such convertible, exercisable or exchangeable securities or obligations (collectively, "New Securities") to any Person (the "Subject Purchaser"), then the Company shall offer such New Securities, in accordance with Section 4.2(a), first to each of the Eligible Investors (each, a "Preemptive Rightholder" and collectively, the "Preemptive Rightholders") by sending written notice (the "New Issuance Notice") to the Preemptive Rightholders, which New Issuance Notice shall state (x) the number of New Securities proposed to be issued and (y) the proposed purchase price per security of the New Securities (the "Proposed Price"). Upon delivery of the New Issuance Notice, such offer shall be irrevocable unless and until the rights provided for in Section 4.2 shall have been waived or shall have expired.

4.2 Preemptive Rights; Exercise.

(a) For a period of twenty (20) days after the giving of the New Issuance Notice pursuant to Section 4.1, each of the Preemptive Rightholders shall have the right to purchase up to its Proportionate Percentage (as hereinafter defined) of the New Securities at a purchase price equal to the Proposed Price and upon the same terms and conditions set forth in the New Issuance Notice, except that if all or any part of the consideration to be paid by a Subject Purchaser is not cash, then the value of the non-cash consideration (other than notes) shall be determined in good faith by a majority of the entire Board of Directors (which determination must include the Series E Preferred Directors) and any Preemptive Rightholder electing to purchase any New Securities may pay the cash equivalent thereof. Each such Preemptive Rightholder shall have the right to purchase that percentage of the New Securities determined by dividing (x) the total number of Shares then owned by such Preemptive Rightholder exercising its rights under this Section 4.2 by (y) the total number of shares of Common Stock then issued and outstanding (assuming for such purpose, the complete exercise, exchange or conversion of all then issued and outstanding Common Stock Equivalents) (the "Proportionate Percentage"). If any Preemptive Rightholder does not fully subscribe for the number or amount of New Securities that it or he is entitled to purchase pursuant to the preceding sentence, then each other fully participating Preemptive Rightholder shall have the right to purchase that percentage of the remaining New Securities not so subscribed for (for the purposes of this Section 4.2(a), the "Excess New Securities") determined by dividing (x) the total number of Shares then owned by such fully participating Preemptive Rightholder by (y) the total number of Shares then owned by all fully participating Preemptive Rightholders who elected to purchase Excess New Securities. The procedure described in the preceding sentence shall be repeated until there are no remaining Excess New Securities.

(b) The right of each Preemptive Rightholder to purchase the New Securities under Section 4.2(a) above shall be exercisable by delivering written notice of the exercise thereof, prior to the expiration of the 20-day period referred to in Section 4.2(a) above, to the Company, which notice shall state the amount of New Securities that such Preemptive Rightholder elects to purchase pursuant to Section 4.2(a). The failure of a Preemptive Rightholder to respond within such 20-day period shall be deemed to be a waiver of such Preemptive Rightholder's rights under Section 4.2(a), provided that each Preemptive Rightholder may waive its rights under Section 4.2(a) prior to the expiration of such 20-day period by giving written notice to the Company.

4.3 Closing. The closing of the purchase of New Securities subscribed for by the Preemptive Rightholders under Section 4.2 shall be held at the executive offices of the Company at 11:00 a.m., local time, on (a) the date of the initial closing of the sale to the Subject Purchaser made pursuant to Section 4.4 if the Preemptive Rightholders elect to purchase some, but not all, of the New Securities under Section 4.2, or (b) at another time and place if the the parties to the transaction so agree in writing. At such closing, the Company shall deliver certificates representing the New Securities, and such New Securities shall be issued free and clear of all Liens (other than those arising hereunder and those attributable to actions by the purchasers thereof) and the Company shall so represent and warrant, and further represent and warrant that such New Securities shall be, upon issuance thereof to the Preemptive Rightholders and after payment therefor, duly authorized, validly issued, fully paid and non-assessable. Each Preemptive Rightholder purchasing the New Securities shall deliver at the closing payment in full in immediately available funds for the New Securities purchased by him or it. At such closing, all of the parties to the transaction shall execute such additional documents as are otherwise necessary or appropriate.

4.4 Sale to Subject Purchaser. The Company may sell to the Subject Purchaser all of the New Securities not purchased by the Preemptive Rightholders pursuant to Section 4.2 on terms and conditions that are no more favorable to the Subject Purchaser than those set forth in the New Issuance Notice; provided, however, that such sale is bona fide and consummated within ninety (90) days following the earlier to occur of (i) the waiver by the Preemptive Rightholders of their option to purchase New Securities pursuant to Section 4.2, and (ii) the expiration of the 20-day period referred to in Section 4.2. If such sale is not consummated within such 90-day period for any reason, then the restrictions provided for herein shall again become effective, and no issuance and sale of New Securities may be made thereafter by the Company without again offering the same in accordance with this Section 4. The closing of any issuance and purchase pursuant to this Section 4.4 shall be held at a time and place as the parties to the transaction may agree within such 90-day period.

5. After-Acquired Securities; Agreement to be Bound.

5.1 After-Acquired Securities. All of the provisions of this Agreement shall apply to all of the Shares and Common Stock Equivalents now owned or which may be issued or Transferred hereafter to a Stockholder in consequence of any additional issuance, purchase, exchange or reclassification of any of such Shares or Common Stock Equivalents, corporate reorganization, or any other form of recapitalization, consolidation, merger, share split or share dividend, or which are acquired by a Stockholder in any other manner.

5.2 Agreement to be Bound. The Company shall not issue any shares of capital stock or any Common Stock Equivalents to any Person not a party to this Agreement, other than any Common Stock Equivalents issued to directors, officers, employees or consultants of the Company pursuant to the Stock Option Plan, unless either (a) such Person has agreed in writing to be bound by the terms and conditions of this Agreement pursuant to an instrument substantially in the form attached hereto as Exhibit B, or (b) such Person has otherwise entered into an agreement with the Company restricting the Transfer of its or his Shares in form and substance reasonably satisfactory to the Eligible Investors holding a majority of the voting power of the Shares held by the Eligible Investors. Upon the exercise of any Common Stock Equivalents under the Stock Option Plan, the holder of such Common Stock Equivalents shall agree in writing to be bound by the terms and conditions of this Agreement pursuant to an instrument substantially in the form attached hereto as Exhibit B. Upon becoming a party to this Agreement, such Person shall be deemed to be a party to, and bound by, the provisions of this Agreement. Any issuance of Shares or any Common Stock Equivalents by the Company in violation of this Section 5.2 shall be null and void *abinitio*.

6. Corporate Governance.

6.1 General. From and after the execution of this Agreement, each Stockholder shall vote its Shares at any regular or special meeting of stockholders of the Company (a "Stockholders Meeting") or in any written consent executed in lieu of such a meeting of stockholders (a "Written Consent"), and shall take all other actions necessary, to give effect to the provisions of this Agreement (including, without limitation, Section 6.2 hereof).

6.2 Election of Directors; Number and Composition.

(a) Number. Each Stockholder shall vote its Shares at any Stockholders Meeting, or act by Written Consent with respect to such Shares, and take all other actions necessary to ensure that the number of directors constituting the entire Board of Directors shall consist of such number of directors as is authorized in accordance with the Charter Documents.

(b) Composition. Each Stockholder shall vote its Shares at any Stockholders Meeting called for the purpose of filling the positions on the Board of Directors, or in any Written Consent executed for such purpose, and take all other actions necessary to ensure: (i) the nomination and election to the Board of Directors of two individuals designated by the holders of at least a majority of the issued and outstanding Series E Preferred Stock (the "Series E Preferred Director"); (ii) the nomination and election to the Board of Directors of one individual who shall be the then current chief executive officer of the Company (the "CEO Director"), who shall initially be Dragan Cicic, M.D., (iii) the nomination and election to the Board of Directors of two individuals who are not employees, officers or directors of any of the Investors or any of their respective Affiliates.

6.3 Removal and Replacement of Directors.

(a) Replacement of Directors. If at any time, a vacancy is created on the Board of Directors by reason of the incapacity, death, removal or resignation of a director designated by the Stockholders entitled to designate directors under Section 6.2(b) (each a "Designating Party"), then the Designating Party shall promptly designate a new director and, after written notice to each of the other Stockholders and the Company of such new designee, each Stockholder shall vote all of its or his Shares so as to elect such new designee to the Board of Directors.

(b) Removal of Directors. Each Designating Party may remove its designated director at any time and for any reason (or no reason) in such Designating Party's sole discretion and, after written notice to each of the other Stockholders and the Company of the new designee to replace such removed director, each Stockholder shall vote all of its Shares so as to elect such new designee to the Board of Directors.

6.4 Reimbursement of Expenses; D&O Insurance. The Company shall reimburse the members of the Board of Directors for all reasonable travel and accommodation expenses incurred by the directors in connection with the performance of their duties as directors of the Company upon presentation of appropriate documentation therefor.

6.5 Annual Budget. Not less than thirty (30) days prior to the end of each fiscal year, the Company shall prepare and submit to the Board of Directors for its approval an annual operating budget for the next succeeding fiscal year in reasonable detail.

6.6 Books and Records. The Company shall, and shall cause its subsidiaries to, keep proper books of records and account, in which full and correct entries shall be made of all financial transactions and the assets and business of the Company and each of its subsidiaries in accordance with generally accepted accounting principles consistently applied.

7. Stock Certificate Legend. A copy of this Agreement shall be filed with the Secretary of the Company and kept with the records of the Company. Each certificate representing Shares now held or hereafter acquired by any Stockholder shall for as long as this Agreement is effective bear legends substantially in the following forms:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE. THE SECURITIES MAY NOT BE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT AND APPLICABLE STATE SECURITIES LAWS OR PURSUANT TO AN APPLICABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND SUCH LAWS.

THE SALE, ASSIGNMENT, HYPOTHECATION, PLEDGE, ENCUMBRANCE OR OTHER DISPOSITION (EACH A "TRANSFER") AND VOTING OF ANY OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE RESTRICTED BY THE TERMS OF THE AMENDED AND RESTATED STOCKHOLDERS AGREEMENT, DATED AS OF THE DATE HEREOF, AMONG THE COMPANY AND THE STOCKHOLDERS NAMED THEREIN, A COPY OF WHICH MAY BE INSPECTED AT THE COMPANY'S PRINCIPAL OFFICE**.** THE COMPANY WILL NOT REGISTER THE TRANSFER OF SUCH SECURITIES ON THE BOOKS OF THE COMPANY UNLESS AND UNTIL THE TRANSFER HAS BEEN MADE IN COMPLIANCE WITH THE TERMS OF THE AMENDED AND RESTATED STOCKHOLDERS AGREEMENT.

9. Miscellaneous.

9.1 Recapitalizations, Exchanges, etc. The provisions of this Agreement shall apply to the full extent set forth herein with respect to (a) the shares of Common Stock and Preferred Stock, (b) any and all shares of capital stock of the Company into which the shares of Common Stock or Preferred Stock, as applicable, are converted, exchanged or substituted in any recapitalization or other capital reorganization by the Company and (c) any and all equity securities of the Company or any successor or assign of the Company (whether by merger, consolidation, sale of assets or otherwise) which may be issued in respect of, in conversion of, in exchange for or in substitution of, the shares of Common Stock and Preferred Stock, as applicable, and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof. The Company shall cause any successor or assign (whether by merger, consolidation, sale of assets or otherwise) to enter into a stockholders agreement with the Investors and other Stockholders on terms substantially the same as this Agreement as a condition of any such transaction.

8.2 Notices. All notices, demands or other communications provided for or permitted hereunder shall be made in writing and shall be sent by registered or certified first class mail, return receipt requested, telecopier, courier service, overnight mail or personal delivery:

(a) if to the Company:
Actinium Pharmaceuticals, Inc.
_____
_____
U.S.A.
Telefax: _____
Attention: Dragan Cicic, M.D.

with a copy to:
_____
_____
_____

(b) if to AHL:
Actinium Holdings Limited
_____
_____
Telefax _____
Attention: [_____]

with a copy to:
_____
_____

(c) if to Organon:
N.V. Organon
[_____]
Telecopy: [_____]
Attention: [_____]

(d) if to any Major Stockholder or Stockholder, at its address as it appears on the record books of the Company.

Any party may, by notice given in accordance with this Section 8.2, designate another address or Person for receipt of notices hereunder. All such notices, demands and other communications shall be deemed to have been duly given when delivered by hand, if personally delivered; when delivered by courier, if delivered by commercial courier service; five (5) Business Days after being deposited in the mail, postage prepaid, if mailed; and when receipt is mechanically acknowledged, if telecopied or sent by electronic mail.

8.3 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors, heirs, legatees and legal representatives. This Agreement is not assignable except in connection with a Transfer of Shares in accordance with this Agreement.

8.4 Amendment and Waiver.

(a) Except as specifically set forth in this Agreement, no failure or delay on the part of any party hereto in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. The remedies provided for herein are cumulative and are not exclusive of any remedies that may be available to the parties hereto at law, in equity or otherwise.

(b) Any amendment, supplement or modification of or to any provision of this Agreement, any waiver of any provision of this Agreement, and any consent to any departure by any party from the terms of any provision of this Agreement, shall be effective only if it is made or given in writing and signed by the Company, the Stockholders holding a majority of the voting power of the Shares held by the Stockholders, and Series E Investors holding a majority of the voting power of the Shares held by the Series E Investors. Any such amendment, supplement, modification, waiver or consent shall be binding upon the Company and all of the Stockholders.

8.5 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument. This Agreement may be executed by facsimile signature(s) which shall be binding on the party delivering same, to be followed by delivery of originally executed signature pages.

8.6 Specific Performance. The parties hereto intend that each of the parties have the right to seek damages or specific performance in the event that any other party hereto fails to perform such party's obligations hereunder. Therefore, if any party shall institute any action or proceeding to enforce the provisions hereof, any party against whom such action or proceeding is brought hereby waives any claim or defense therein that the plaintiff party has an adequate remedy at law.

8.7 Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

8.8 GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW OF ANY JURISDICTION.NO SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT MAY BE BROUGHT IN ANY COURT OR BEFORE ANY SIMILAR AUTHORITY OTHER THAN IN A COURT OF COMPETENT JURISDICTION IN THE STATE OF NEW YORK AND THE PARTIES HEREBY SUBMIT TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS FOR THE PURPOSE OF SUCH SUIT, PROCEEDING OR JUDGMENT. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY RIGHT WHICH IT MAY HAVE HAD TO BRING SUCH AN ACTION IN ANY OTHER COURT, DOMESTIC OR FOREIGN, OR BEFORE ANY SIMILAR DOMESTIC OR FOREIGN AUTHORITY AND AGREES NOT TO CLAIM OR PLEAD THE SAME. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING IN RELATION TO THIS AGREEMENT AND FOR ANY COUNTERCLAIM THEREIN.

8.9 Severability. If any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions hereof shall not be in any way impaired, unless the provisions held invalid, illegal or unenforceable shall substantially impair the benefits of the remaining provisions hereof.

8.10 Entire Agreement. This Agreement, together with the exhibits hereto, is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein and therein. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein or therein. This Agreement, together with the exhibits hereto, supersedes all prior agreements and understandings among the parties with respect to such subject matter, including the Prior Stockholders Agreement.

8.11 Term of Agreement. This Agreement shall become effective upon the execution hereof and shall terminate upon the first to occur of (a) the consummation of the Qualified Initial Public Offering or b) the consummation of a Pubco Transaction.

8.12 Further Assurances. Each of the parties shall, and shall cause their respective Affiliates to, execute such instruments and take such action as may be reasonably required or desirable to carry out the provisions hereof and the transactions contemplated hereby.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the undersigned have executed, or have caused to be executed, this Amended and Restated Stockholders Agreement on the date first written above.

ACTINIUM PHARMACEUTICALS, INC.
By:
Name:
Title:
ACTINIUM HOLDINGS LIMITED
By:
Name:
Title:
N.V. ORGANON
By:

Name:
Title:
DR. MAURITS GEERLINGS, JR.
_____

The Purchasers of Series E Preferred Shares, to be set forth on Schedule A to this Agreement, have executed a Subscription Agreement with the Company which provides, among other things, that by executing the Subscription Agreement each Purchaser is deemed to have executed the AMENDED AND RESTATED STOCKHOLDERS AGREEMENT in all respects.

mailto:

[Remainder of Page Intentionally Left Blank]

SCHEDULE A

Stockholder	Number and Type of Shares of Capital Stock

EXHIBIT A1

ACKNOWLEDGMENT AND AGREEMENT

The undersigned wishes to receive from _____ ("Transferor") _____ shares, par value **$[insert number]** per share, of [Common Stock] [Preferred Stock] or certain options, warrants or other rights to purchase _____ shares of [Common Stock] [Preferred Stock] (the "Shares") of Actinium Pharmaceuticals, Inc., a Delaware corporation (the "Company");

The Shares are subject to the Amended and Restated Stockholders Agreement, dated [ ] (the " Agreement"), among the Company and the other parties listed on the signature pages thereto;

The undersigned has been given a copy of the Agreement and afforded ample opportunity to read and to have counsel review it, and the undersigned is thoroughly familiar with its terms;

Pursuant to the terms of the Agreement, the Transferor is prohibited from Transferring such Shares and the Company is prohibited from registering the Transfer of the Shares unless and until a Transfer is made in accordance with the terms and conditions of the Agreement and the recipient of such Shares acknowledges the terms and conditions of the Agreement and agrees to be bound thereby; and

The undersigned wishes to receive such Shares and have the Company register the Transfer of such Shares.

In consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and to induce the Transferor to Transfer such Shares to the undersigned and the Company to register such Transfer, the undersigned does hereby acknowledge and agree that (i) he[/she] has been given a copy of the Agreement and afforded ample opportunity to read and to have counsel review it, and the undersigned is thoroughly familiar with its terms, (ii) the Shares are subject to the terms and conditions set forth in the Agreement, and (iii) the undersigned does hereby agree fully to be bound thereby as a "Stockholder" and as [SELECT AS APPROPRIATE] [an "Investor"] [an "Eligible Investor"] [a "Major Stockholder"] (as therein defined).

This _____ day of _____, 20__.

_____

[1]For Transfers of previously issued stock.

EXHIBIT B[1/]

ACKNOWLEDGMENT AND AGREEMENT

The undersigned wishes to receive from Actinium Pharmaceuticals, Inc., a Delaware corporation (the "Company"), _____ shares, par value $**[insert number]** per share, of [Common Stock] [Preferred Stock], or certain newly issued options, warrants or other rights to purchase _____ shares of [Common Stock] [Preferred Stock] (the "Shares"), of the Company;

The Shares are subject to the Amended and Restated Stockholders Agreement, dated [ ] (the " Agreement"), among the Company and the other parties listed on the signature pages thereto;

The undersigned has been given a copy of the Agreement and afforded ample opportunity to read and to have counsel review it, and the undersigned is thoroughly familiar with its terms;

Pursuant to the terms of the Agreement, the Company is prohibited from issuing the Shares unless and until a Transfer is made in accordance with the terms and conditions of the Agreement and the recipient of such Shares acknowledges the terms and conditions of the Agreement and agrees to be bound thereby; and

The undersigned wishes to receive such Shares.

In consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and to induce the Company to issue such Shares, the undersigned does hereby acknowledge and agree that (i) he[/she] has been given a copy of the Agreement and afforded ample opportunity to read and to have counsel review it, and the undersigned is thoroughly familiar with its terms, (ii) the Shares are subject to terms and conditions set forth in the Agreement, and (iii) the undersigned does hereby agree fully to be bound thereby as a "Stockholder".

This _____ day of _____, 20__.

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EXHIBITS

A	Form of Transfer Agreement (Previously issued shares)
B	Form of Transfer Agreement (Newly issued shares)

Exhibit 14.1

CODE OF BUSINESS CONDUCT AND ETHICS

FOR

CACTUS VENTURES, INC.

CODE OF BUSINESS CONDUCT AND ETHICS

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I. INTRODUCTION

This Code of Business Conduct and Ethics (the "Code") helps ensure compliance with legal requirements and our standards of business conduct. This Code applies to directors, officers and employees of Cactus Ventures, Inc. (the "Corporation"). Therefore, all directors, officers and employees of the Corporation are expected to read and understand this Code, uphold these standards in day-to-day activities, comply with all applicable policies and procedures, and ensure that all agents and contractors are aware of, understand and adhere to these standards.

Because the principles described in this Code are general in nature, all corporate directors, officers and employees should also review all applicable corporate policies and procedures for more specific instruction, and contact the CEO or CFO with any questions.

The Corporation is committed to continuously reviewing and updating its policies and procedures. Therefore, this Code is subject to modification. This Code supersedes all other such codes, policies, procedures, instructions, practices, rules or written or verbal representations to the extent they are inconsistent.

II. COMPLIANCE IS EVERYONE'S BUSINESS

Ethical business conduct is critical to the business of the Corporation. Each director, officer or employee has a responsibility is to respect and adhere to these practices. Many of these practices reflect legal or regulatory requirements. Violations of these laws and regulations can create significant liability for the violator, the Corporation, its directors, officers, and other employees.

Part of the job and ethical responsibility of each director, officer and employee is to help enforce this Code. Each director, officer and employee should be alert to possible violations and report possible violations to the CEO and/or CFO.

Each director, officer and employee must cooperate in any internal or external investigations of possible violations.

Reprisal, threats, retribution or retaliation against any person who has in good faith reported a violation or a suspected violation of law, this Code or other Corporate policies, or against any person who is assisting in any investigation or process with respect to such a violation, is prohibited.

Violations of law, this Code, or other Corporate policies or procedures should be reported to the CEO and/or CFO.

Violations of law, this Code or other Corporate policies or procedures by Corporate directors, officers or employees can lead to disciplinary action up to and including termination.

In trying to determine whether any given action is appropriate, use the following test: Imagine that the words you are using or the action you are taking is going to be fully disclosed in the media with all the details, including your photo. If you are uncomfortable with the idea of this information being made public, perhaps you should think again about your words or your course of action.

In all cases, if you are unsure about the appropriateness of an event or action, please seek assistance in interpreting the requirements of these practices by contacting the CEO and/or CFO.

III. YOUR RESPONSIBILITIES TO THE CORPORATION AND ITS STOCKHOLDERS

A. General Standards of Conduct

The Corporation expects all directors, officers, employees, agents and contractors to exercise good judgment to ensure the safety and welfare of employees, agents and contractors and to maintain a cooperative, efficient, positive, harmonious and productive work environment and business organization. These standards apply while working on our premises, at offsite locations where our business is being conducted, at Corporate-sponsored business and social events, or at any other place where any director, officer or employee is acting as a representative of the Corporation. Directors, officers, employees , agents or contractors who engage in misconduct or whose performance is unsatisfactory may be subject to corrective action, up to and including termination.

B. Applicable Laws

All Corporate directors, officers, employees, agents and contractors must comply with all applicable laws, regulations, rules and regulatory orders. Corporate directors, officers and employees located outside of the United States must comply with laws, regulations, rules and regulatory orders of the United States, including the Foreign Corrupt Practices Act and the U.S. Export Control Act, in addition to applicable local laws. Each director, officer, employee, agent and contractor must acquire appropriate knowledge of the requirements relating to his or her duties sufficient to enable him or her to recognize potential dangers and to know when to seek advice from the CEO and/or CFO on specific Corporate policies and procedures. Violations of laws, regulations, rules and orders may subject the director, officer, employee, agent or contractor to individual criminal or civil liability, as well as to discipline by the Corporation. Such individual violations may also subject the Corporation to civil or criminal liability or the loss of business.

C. Conflicts of Interest

Each director, officer and employee has a responsibility to the Corporation, the stockholders and each other.

Although this duty does not prevent any director, officer and employee from engaging in personal transactions and investments, it does demand avoiding situations where a conflict of interest might occur or appear to occur. The Corporation is subject to scrutiny from many different individuals and organizations.

Each director, officer and employee should always strive to avoid even the appearance of impropriety.

What constitutes conflict of interest? A conflict of interest exists where the interests or benefits of one person or entity conflict with the interests or benefits of the Corporation.

Examples include:

(i) **Employment/Outside Employment**. In consideration of the appointment or employment with the Corporation, each director, officer and employee is expected to devote full attention to the business interests of the Corporation. Engaging in any activity that interferes with one's performance or responsibilities to the Corporation or is otherwise in conflict with or prejudicial to the Corporation is prohibited. The Corporation's policies prohibit any director, officer or employee from accepting simultaneous employment with a Corporate supplier, customer, developer or competitor, or from taking part in any activity that enhances or supports a competitor's position. Additionally, each director, officer and employee must disclose to the Corporation any interest that may conflict with the business of the Corporation. Any questions on this requirement should be directed to a supervisor or the CEO.

(ii) **Outside Directorships**. It is a conflict of interest to serve as a director of any company that competes with the Corporation. Although a director, officer and employee may serve as a director of a Corporate supplier, customer, developer, or other business partner, the Corporation's policy requires that approval first be obtained from the Corporation's Board of Directors (the "Board") before accepting a directorship. Any compensation received should be commensurate to the responsibilities of holding such position.

Such approval may be conditioned upon the completion of specified actions.

(iii) **Business Interests**. If a director, officer and employee is considering investing in a Corporate customer, supplier or competitor, great care must be taken to ensure that these investments do not compromise any responsibilities owed to the Corporation. Many factors should be considered in determining whether a conflict exists, including the size and nature of the investment; the ability to influence the Corporation's decisions; access to confidential information of the Corporation or of the other company; and the nature of the relationship between the Corporation and the other company.

(iv) **Related Parties**. As a general rule, conducting Corporate business with a relative or significant other, or with a business in which a relative or significant other is associated in any significant role, should be avoided. Relatives include spouse, sister, brother, daughter, son, mother, father, grandparents, aunts, uncles, nieces, nephews, cousins, step relationships, and in-laws. Significant others include persons living in a spousal (including same sex) or familial fashion with an employee.

If such a related party transaction is unavoidable, the nature of the related party transaction must be fully disclosed in advance to the Corporation's Chief Financial Officer ("CFO"). If determined to be material to the Corporation by the CFO, the Corporation's Audit Committee must review and approve in writing in advance such related party transactions. The most significant related party transactions, particularly those involving the Corporation's directors or executive officers, must be reviewed and approved in writing in advance by the Corporation's Board. The Corporation must report all such material related party transactions under applicable accounting rules, federal securities laws, and SEC rules and regulations, and securities market rules. Any dealings with a related party must be conducted in such a way that no preferential treatment is given to this business.

The Corporation discourages the employment of relatives and significant others in positions or assignments within the same department and prohibits the employment of such individuals in positions that have a financial dependence or influence (e.g., an auditing or control relationship, or a supervisor/subordinate relationship). The purpose of this policy is to prevent the organizational impairment and conflicts that are a likely outcome of the employment of relatives or significant others, especially in a supervisor/subordinate relationship. If a question arises about whether a relationship is covered by this policy, the CEO is responsible for determining whether an applicant or transferee's acknowledged relationship is covered by this policy. The CEO shall advise all affected applicants and transferees of this policy. Willful withholding of information regarding a prohibited relationship/reporting arrangement may be subject to corrective action, up to and including termination. If a prohibited relationship exists or develops between two employees, the employee in the senior position must bring this to the attention of his/her supervisor. The Corporation retains the prerogative to separate the individuals at the earliest possible time, either by reassignment or by termination, if necessary.

(v) **Other Situations**. Because other conflicts of interest may arise, it would be impractical to attempt to list all possible situations. Directors, officers and employees should consult the CFO and/or CEO if a proposed transaction or situation raises any questions or doubts.

D. Corporate Opportunities

Employees, officers and directors may not exploit for their own personal gain opportunities that are discovered through the use of corporate property, information or position unless the opportunity is disclosed fully in writing to the Corporation's Board and the Board declines to pursue such opportunity.

E. Protecting the Corporation's Confidential Information

The Corporation's confidential information is a valuable asset. The Corporation's confidential information includes our database of customer contacts; details regarding our equipment procurement sources; names and lists of customers, suppliers and employees; and financial information. This information is the property of the Corporation and may be protected by patent, trademark, copyright and trade secret laws. All confidential information must be used for Corporate business purposes only. Every director, officer, employee, agent and contractor must safeguard it.

THIS RESPONSIBILITY INCLUDES NOT DISCLOSING THE CORPORATION'S CONFIDENTIAL INFORMATION SUCH AS INFORMATION REGARDING THE CORPORATION'S PRODUCTS OR BUSINESS OVER THE INTERNET .

Each director, officer and employee is also responsible for properly labeling any and all documentation shared with or correspondence sent to the CEO, CFO or outside counsel as "Attorney-Client Privileged." This responsibility includes the safeguarding, securing and proper disposal of confidential information in accordance with the Corporation's policy on Maintaining and Managing Records set forth in Section III.I of this Code. This obligation extends to confidential information of third parties, which the Corporation has rightfully received under Non-Disclosure Agreements. See the Corporation's policy dealing with Handling Confidential Information of Others set forth in Section IV.D of this Code.

(i) **Proprietary Information and Invention Agreement** . Upon joining the Corporation, each director, officer and employee signed an agreement to protect and hold confidential the Corporation's proprietary information. This agreement remains in effect for the entire term of employment with the Corporation and remains in effect thereafter. Under this agreement, the Corporation's confidential information may not be disclosed to anyone or used to benefit anyone other than the Corporation without the prior written consent of an authorized Corporate officer.

(ii) **Disclosure of Corporate Confidential Information**. To further the Corporation's business from time to time, confidential information of the Corporation may be disclosed to potential business partners. However, such disclosure should never be done without careful consideration of its potential benefits and risks. If, in consultation with a manager and other appropriate Corporate management, it is determined that disclosure of confidential information is necessary, the CEOshould be contacted to ensure that an appropriate written nondisclosure agreement is signed prior to the disclosure. The Corporation has standard nondisclosure agreements suitable for most disclosures. In addition, all Corporate materials that contain Corporate confidential information, including presentations, must be reviewed and approved by the CFO and/or CEO prior to publication or use.

Furthermore, any employee publication or publicly made statement that might be perceived or construed as attributable to the Corporation, made outside the scope of his or her employment with the Corporation, must be reviewed in advance and approved in writing by the CEO and must include the Corporation's standard disclaimer that the publication or statement represents the views of the specific author and not of the Corporation.

(iii) **Requests by Regulatory Authorities** . The Corporation and its directors, officers, employees, agents and contractors must cooperate with appropriate government inquiries and investigations. In this context, however, it is important to protect the legal rights of the Corporation with respect to its confidential information. All government requests for information, documents or investigative interviews must be referred to the CEO. No financial information may be disclosed without the prior approval of the CFO.

(iv) **Corporate Spokespeople**. Specific policies have been established regarding who may communicate information to the press and the financial analyst community. All inquiries or calls from the press and financial analysts should be referred to the CFO. The Corporation has designated its Chief Executive Officer ("CEO") and CFO as official Corporate spokespeople for financial matters. These designees are the only people who may communicate with the press on behalf of the Corporation.

F. Obligations under Securities Laws-"Insider" Trading

Obligations under the U.S. securities laws apply to everyone. In the normal course of business, officers, directors, employees, agents, contractors and consultants of the Corporation may come into possession of significant, sensitive information. This information is the property of the Corporation, and any director, officer or employee in possession of such information has been entrusted with it. No director, officer or employee may profit from it by buying or selling securities on their own behalf, or passing on the information to others to enable them to profit or for them to profit on behalf of such director, officer or employee. The purpose of this policy is both to inform all Corporate employees of the legal responsibilities and to make clear that the misuse of sensitive information is contrary to Corporate policy and U.S. securities laws.

Insider trading is a crime, penalized by fines of up to $5,000,000 and 20 years in jail for individuals. In addition, the SEC may seek the imposition of a civil penalty of up to three times the profits made or losses avoided from the trading. Insider traders must also disgorge any profits made, and are often subjected to an injunction against future violations. Finally, insider traders may be subjected to civil liability in private lawsuits.

Employers and other controlling persons (including supervisory personnel) are also at risk under U.S. securities laws. Controlling persons may, among other things, face penalties of the greater of $5,000,000 or three times the profits made or losses avoided by the trader if they recklessly fail to take preventive steps to control insider trading.

Thus, it is important that insider-trading violations not occur. Stock market surveillance techniques are becoming increasingly sophisticated, and the chance that U.S. federal or other regulatory authorities will detect and prosecute even small-level trading is significant. Insider trading rules are strictly enforced, even in instances when the financial transactions seem small. Any questions about the ability to trade should be directed to the CFO and/or CEO.

The Corporation has imposed a trading blackout period on members of the Board, executive officers and certain designated employees who, as a consequence of their position with the Corporation, are more likely to be exposed to material nonpublic information about the Corporation. These directors, executive officers and employees generally may not trade in Corporate securities during the blackout periods.

For more details, and to determine whether a trade restriction applies during trading Blackout periods, each director, officer and employee should review the Corporation's Insider Trading Compliance Program carefully, paying particular attention to the specific policies and the potential criminal and civil liability and disciplinary action for insider trading violations. Directors, officers, employees , agents and contractors of the Corporation who violate this policy are also be subject to disciplinary action by the Corporation, which may include termination of employment or of business relationship. All questions regarding the Corporation's Insider Trading Compliance Program should be directed to the Corporation's CFO and/or CEO. In general, no director, officer or employee should buy or sell the corporation's stock without prior approval from the CEO and/or CFO.

G. Prohibition against Short Selling of Corporate Stock

No Corporate director, officer or other employee, agent or contractor may, directly or indirectly, sell any equity security, including derivatives, of the Corporation (1) if he or she does not own the security sold, or (2) if he or she owns the security, does not deliver it against such sale (a "short sale against the box") within twenty days thereafter, or does not within five days after such sale deposit it in the mails or other usual channels of transportation. No Corporate director, officer or other employee, agent or contractor may engage in short sales. A short sale, as defined in this policy, means any transaction whereby one may benefit from a decline in the Corporation's stock price. While law from engaging in short sales of Corporation's securities does not prohibit employees who are not executive officers or directors, the Corporation has adopted as policy that employees may not do so.

H. Use of Corporation's Assets

(i) **General.** Protecting the Corporation's assets is a key fiduciary responsibility of every director, officer, employee, agent and contractor. Care should be taken to ensure that assets are not misappropriated, loaned to others, or sold or donated, without appropriate authorization. All Corporate directors, officers, employees, agents and contractors are responsible for the proper use of Corporate assets, and must safeguard such assets against loss, damage, misuse or theft.

Directors, officers, employees , agents or contractors who violate any aspect of this policy or who demonstrate poor judgment in the manner in which they use any Corporate asset may be subject to disciplinary action, up to and including termination of employment or business relationship at the Corporation's sole discretion. Corporate equipment and assets are to be used for Corporate business purposes only. Directors, officers, employees , agents and contractors may not use Corporate assets for personal use, nor may they allow any other person to use Corporate assets. All questions regarding this policy should be b rought to the attention of the CFO.

(ii) **Physical Access Control**. The Corporation has and will continue to develop procedures covering physical access control to ensure privacy of communications, maintenance of the security of the Corporation communication equipment, and safeguard Corporate assets from theft, misuse and destruction. Each director, officer and employee is personally responsible for complying with the level of access control that has been implemented in the facility where such director, officer and employee works on a permanent or temporary basis and must not defeat or cause to be defeated the purpose for which the access control was implemented.

(iii) **Corporate Funds**. Every Corporate director, officer or employee is personally responsible for all Corporate funds over which he or she exercises control. Corporate agents and contractors should not be allowed to exercise control over Corporate funds. Corporate funds must be used only for Corporate business purposes. Every Corporate director, officer, employee, agent and contractor must take reasonable steps to ensure that the Corporation receives good value for Corporate funds spent, and must maintain accurate and timely records of each and every expenditure. Expense reports must be accurate and submitted in a timely manner, generally within 30 days of the expense being incurred. Corporate directors, officers, employees, agents and contractors must not use Corporate funds for any personal purpose.

(iv) **Computers and Other Equipment**. The Corporation strives to furnish officers and employees with the equipment necessary to efficiently and effectively do their jobs. Each officer and employee must care for that equipment and use it responsibly only for Corporate business purposes. If Corporate equipment is used at home or off site, precautions must be taken to protect it from theft or damage. All Corporate equipment must be returned immediately upon termination of employment. While computers and other electronic devices are made accessible to officers and employees to assist them to perform their jobs and to promote the Corporation's interests, all such computers and electronic devices, whether used entirely or partially on the Corporation's premises or with the aid of the Corporation's equipment or resources, must remain fully accessible to the Corporation and, to the maximum extent permitted by law, will remain the sole and exclusive property of the Corporation.

Officers, employees , agents and contractors should not maintain any expectation of privacy with respect to information transmitted over, received by, or stored in any electronic communications device owned, leased, or operated in whole or in part by or on behalf of the Corporation. To the extent permitted by applicable law, the Corporation retains the right to gain access to any information received by, transmitted by, or stored in any such electronic communications device, by and through its officers, employees, agents, contractors, or representatives, at any time, either with or without a officer's, employee's or third party's knowledge, consent or approval.

(v) **Software**. All software used by directors, officers and employees to conduct Corporate business must be appropriately licensed. Officers and employees should never make or use illegal or unauthorized copies of any software, whether in the office, at home, or on the road, since doing so may constitute copyright infringement and may expose such officer, employee and the Corporation to potential civil and criminal liability. In addition, use of illegal or unauthorized copies of software may subject the officer and employee to disciplinary action, up to and including termination. The Corporation's Information Technology Department may inspect Corporate computers periodically to verify that only approved and licensed software has been installed. Any non-licensed/supported software will be removed.

(vi) **Electronic Usage**. The purpose of this policy is to make certain that directors, officers and employees utilize electronic communication devices in a legal, ethical, and appropriate manner. This policy addresses the Corporation's responsibilities and concerns regarding the fair and proper use of all electronic communications devices within the organization, including computers, e-mail, connections to the Internet, intranet and extranet and any other public or private networks, voice mail, video conferencing, facsimiles, and telephones. Posting or discussing information concerning the Corporation's products or business on the Internet without the prior written consent of the Corporation's CFO and/or CEO is prohibited. Any other form of electronic communication used by directors, officers or employees currently or in the future is also intended to be encompassed under this policy. It is not possible to identify every standard and rule applicable to the use of electronic communications devices. Directors, officers and employees are therefore encouraged to use sound judgment whenever using any feature of our communications systems and are expected to review, understand and follow such policies and procedures.

I. Maintaining and Managing Records

The purpose of this policy is to set forth and convey the Corporation's business and legal requirements in managing records, including all recorded information regardless of medium or characteristics. Records include paper documents, CDs, computer hard disks, email, floppy disks, microfiche, microfilm or all other media. Local, state, federal, foreign and other applicable laws, rules and regulations require the Corporation to retain certain records and to follow specific guidelines in managing its records. Civil and criminal penalties for failure to comply with such guidelines can be severe for directors, officers, employees, agents, contractors and the Corporation, and failure to comply with such guidelines may subject the director, officer, employee, agent or contractor to disciplinary action, up to and including termination of employment or business relationship at the Corporation's sole discretion. All original executed documents that evidence contractual commitments or other obligations of the Corporation must be forwarded to the CFO promptly upon completion. Such documents will be maintained and retained in accordance with the Corporation's record retention policies.

J. Records on Legal Hold.

A legal hold suspends all document destruction procedures in order to preserve appropriate records under special circumstances, such as litigation or government investigations. The CFO determines and identifies what types of Corporate records or documents are required to be placed under a legal hold. Every Corporate director, officer, employee, agent and contractor must comply with this policy. Failure to comply with this policy may subject the director, officer, employee, agent or contractor to disciplinary action, up to and including termination of employment or business relationship at the Corporation's sole discretion.

The CFO and/or CEO will notify any director, officer or employee if a legal hold is placed on records for which that person is responsible. The necessary records must thereafter be preserved and protected in accordance with instructions from the CFO.

RECORDS OR SUPPORTING DOCUMENTS THAT HAVE BEEN PLACED UNDER A LEGAL HOLD MUST NOT BE DESTROYED, ALTERED OR MODIFIED UNDER ANY CIRCUMSTANCES.

A legal hold remains effective until it is officially released in writing by the CFO and/or CEO.

Any questions about whether a document has been placed under a legal hold should be directed to the CFO and the document should be preserved and protected until the CFO provides clarification.

K. Payment Practices

(i) **Accounting Practices.** The Corporation's responsibilities to its stockholders and the investing public require that all transactions be fully and accurately recorded in the Corporation's books and records in compliance with all applicable laws. False or misleading entries, unrecorded funds or assets, or payments without appropriate supporting documentation and approval are strictly prohibited and violate Corporate policy and the law.

Additionally, all documentation supporting a transaction should fully and accurately describe the nature of the transaction and be processed in a timely fashion, generally within 30 days.

(ii) **Political Contributions**. The Corporation reserves the right to communicate its position on important issues to elected representatives and other government officials. It is the Corporation's policy to comply fully with all local, state, federal, foreign and other applicable laws, rules and regulations regarding political contributions. The Corporation's funds or assets must not be used for, or be contributed to, political campaigns or political practices under any circumstances without the prior written approval of the CEO and, if required, the Board.

(iii) **Prohibition of Inducements**. Under no circumstances may directors, officers, employees, agents or contractors offer to pay, make payment, promise to pay, or issue authorization to pay any money, gift, or anything of value to customers, vendors, consultants, or other party that is perceived as intending, directly or indirectly, to improperly influence any business decision, any act or failure to act, any commitment of fraud, or opportunity for the commission of any fraud. Inexpensive gifts, infrequent business meals, celebratory events and entertainment, provided that they are not excessive or create an appearance of impropriety, do not violate this policy. Questions regarding whether a particular payment or gift violates this policy should be directed to the CFO and/or CEO.

L. Foreign Corrupt Practices Act.

The Corporation requires full compliance with the Foreign Corrupt Practices Act (FCPA) by all of its directors, officers, employees, agents, and contractors.

The anti-bribery and corrupt payment provisions of the FCPA make illegal any corrupt offer, payment, promise to pay, or authorization to pay any money, gift, or anything of value to any foreign official, or any foreign political party, candidate or official, for the purpose of influencing any act or failure to act in the official capacity of that foreign official or party; or inducing the foreign official or party to use influence to affect a decision of a foreign government or agency, in order to obtain or retain business for anyone, or direct business to anyone.

All Corporate directors, officers, employees, agents and contractors, whether located in the United States or abroad, are responsible for FCPA compliance and the procedures to ensure FCPA compliance.

All managers and supervisory personnel are expected to monitor continued compliance with the FCPA to ensure compliance with the highest moral, ethical and professional standards of the Corporation. FCPA compliance includes the Corporation's policy on Maintaining and Managing Records in Section III.I of this Code.

Laws in most countries outside of the United States also prohibit or restrict government officials or employees of government agencies from receiving payments, entertainment, or gifts for the purpose of winning or keeping business. No contract or agreement may be made with any business in which a government official or employee holds a significant interest, without the prior approval of the CFO and/or CEO.

M. Export Controls

A number of countries maintain controls on the destinations to which products or software may be exported. Some of the strictest export controls are maintained by the United States against countries that the U.S. government considers unfriendly or as supporting international terrorism. The U.S. regulations are complex and apply both to exports from the United States and to exports of products from other countries, when those products contain components or technology of U.S. origin. Software created in the United States is subject to these regulations even if duplicated and packaged abroad. In some circumstances, an oral presentation containing technical data made to foreign nationals in the United States may constitute a controlled export. The CFO can provide guidance on which countries are prohibited destinations for Corporate products or whether a proposed technical presentation to foreign nationals may require a U.S. Government license.

IV. RESPONSIBILITIES TO OUR CUSTOMERS AND OUR SUPPLIERS

A. Customer Relationships

Each time a director, officer or employee comes into contact with any Corporate customers or potential customers, that director, officer or employee represents the Corporation and should therefore act in a manner that creates value for the Corporation's customers and helps to build a relationship based upon trust. The Corporation and its employees have provided products and services for many years and have built up significant goodwill over that time. This goodwill is one of our most important assets, and the Corporation employees, agents and contractors must act to preserve and enhance our reputation.

B. Payments or Gifts from Others

Under no circumstances may directors, officers, employees, agents or contractors accept any offer, payment, promise to pay, or authorization to pay any money, gift, or anything of value from customers, vendors, consultants, or other party that is perceived as intended, directly or indirectly, to influence any business decision, any act or failure to act, any commitment of fraud, or opportunity for the commission of any fraud. Inexpensive gifts, infrequent business meals, celebratory events and entertainment, provided that they are not excessive or create an appearance of impropriety, do not violate this policy. Questions regarding whether a particular payment or gift violates this policy are to be directed to the CFO and/or CEO.

Gifts given by the Corporation to suppliers or customers or received from suppliers or customers should always be appropriate to the circumstances and should never be of a kind that could create an appearance of impropriety. The nature and cost must always be accurately recorded in the Corporation's books and records.

C. Publications of Others

The Corporation subscribes to many publications that help directors, officers and employees do their jobs better. These include newsletters, reference works, online reference services, magazines, books, and other digital and printed works. Copyright law generally protects these works, and their unauthorized copying and distribution constitute copyright infringement. Consent of the publisher of a publication must be obtained before copying publications or significant parts of them. Any questions about whether a publication may be copied should be directed to the CFO.

D. Handling the Confidential Information of Others

The Corporation has many kinds of business relationships with many companies and individuals. Sometimes such other companies and individuals will volunteer confidential information about their products or business plans to induce the Corporation to enter into a business relationship with them. At other times, the Corporation may request that a third party provide confidential information to permit the Corporation to evaluate a potential business relationship with that party. The Corporation must take special care to handle the confidential information of others responsibly, regardless of how it was obtained. Such confidential information should be handled in accordance with the agreements with such third parties. See also the Corporation's policy on Maintaining and Managing Records in Section III.I of this Code.

(i) **Appropriate Nondisclosure Agreements**. Confidential information may take many forms, including an oral presentation about a company's product development plans, which may contain protected trade secrets; a customer list or employee list; which may contain information protected by trade secret and copyright laws.

Employees, officers and directors should never accept information offered by a third party that is represented as confidential, or which appears from the context or circumstances to be confidential, unless an appropriate nondisclosure agreement has been signed with the party offering the information.

THE CFO CAN PROVIDE NONDISCLOSURE AGREEMENTS TO FIT ANY PARTICULAR SITUATION, AND WILL COORDINATE APPROPRIATE EXECUTION OF SUCH AGREEMENTS ON BEHALF OF THE CORPORATION.

Even after a nondisclosure agreement is in place, directors, officers and employees should accept only the information necessary to accomplish the purpose of receiving it, such as a decision on whether to proceed to negotiate a deal. If more detailed or extensive confidential information is offered and it is not necessary for immediate purposes, it should be refused.

(ii) **Need to Know**. Once a third party's confidential information has been disclosed to the Corporation, the Corporation has an obligation to abide by the terms of the relevant nondisclosure agreement and limit its use to the specific purpose for which it was disclosed and to disseminate it only to other Corporate employees with a need to know the information. Every director, officer, employee, agent and contractor involved in a potential business relationship with a third party must understand and strictly observe the restrictions on the use and handling of confidential information. Any questions about how to handle any such information should be directed to the CFO and/or CEO.

(iii) **Notes and Reports**. Any notes taken while reviewing the confidential information of a third party under a nondisclosure agreement, or any reports summarizing the results of the review or drawing conclusions about the suitability of a business relationship, can include confidential information disclosed by the other party and should be retained only long enough to complete the evaluation of the potential business relationship.

(iv) **Competitive Information**. No director, officer or employee should attempt to obtain a competitor's confidential information by improper means, and should never contact a competitor regarding their confidential information. While the Corporation may, and does, employ former employees of competitors, it recognizes and respects the obligations of those employees not to use or disclose the confidential information of their former employers.

E. Selecting Suppliers

The Corporation's suppliers make significant contributions to the success of the Corporation. To create an environment where Corporate suppliers have an incentive to work with the Corporation, they must be confident that they will be treated lawfully and in an ethical manner. The Corporation's policy is to purchase supplies based on need, quality, service, price and terms and conditions. The Corporation's policy is to select significant suppliers or enter into significant supplier agreements though a competitive bid process where possible. Under no circumstances should any Corporate director, officer, employee, agent or contractor attempt to coerce suppliers in any way. The confidential information of a supplier is entitled to the same protection as that of any other third party and must not be received before an appropriate nondisclosure agreement has been signed. A supplier's performance should never be discussed with anyone outside the Corporation. A supplier to the Corporation is generally free to sell its products or services to any other party, including competitors of the Corporation. In some cases where the products or services have been designed, fabricated, or developed to our specifications the agreement between the parties may contain restrictions on sales.

F. Government Relations

It is the Corporation's policy to comply fully with all applicable laws and regulations governing contact and dealings with government employees and public officials, and to adhere to high ethical, moral and legal standards of business conduct. This policy includes strict compliance with all local, state, federal, foreign and other applicable laws, rules and regulations.

Any questions concerning government relations should be directed to the CFO and/or CEO.

G. Lobbying

Directors, officers, employees , agents or contractors whose work requires lobbying communication with any member or employee of a legislative body or with any government official or employee in the formulation of legislation must have prior written approval of such activity from the CEO. Activity covered by this policy includes meetings with legislators or members of their staffs or with senior executive branch officials. Preparation, research, and other background activities that are done in support of lobbying communication are also covered by this policy even if the communication ultimately is not made.

H. Government Contracts

It is the Corporation's policy to comply fully with all applicable laws and regulations that apply to government contracting. It is also necessary to strictly adhere to all terms and conditions of any contract with local, state, federal, foreign or other applicable governments.

The CFO must review and approve all contracts with any government entity.

I. Free and Fair Competition

Most countries have well-developed bodies of law designed to encourage and protect free and fair competition. The Corporation is committed to obeying both the letter and spirit of these laws. The consequences of not doing so can be severe.

These laws often regulate the Corporation's relationships with its distributors, resellers, dealers, and customers. Competition laws generally address the following areas: pricing practices (including price discrimination), discounting, terms of sale, credit terms, promotional allowances, secret rebates, exclusive dealerships or distributorships, product bundling, restrictions on carrying competing products, termination, and many other practices.

Competition laws also govern, usually quite strictly, relationships between the Corporation and its competitors. As a general rule, contacts with competitors should be limited and should always avoid subjects such as prices or other terms and conditions of sale, customers, and suppliers. Employees, agents or contractors of the Corporation may not knowingly make false or misleading statements regarding its competitors or the products of its competitors, customers or suppliers. Participating with competitors in a trade association or in a standards creation body is acceptable when the association has been properly established, has a legitimate purpose, and has limited its activities to that purpose.

No , officer, employee, agent or contractor shall at any time or under any circumstances enter into an agreement or understanding, written or oral, express or implied, with any competitor concerning prices, discounts, other terms or conditions of sale, profits or profit margins, costs, allocation of product or geographic markets, allocation of customers, limitations on production, boycotts of customers or suppliers, or bids or the intent to bid or even discuss or exchange information on these subjects. In some cases, legitimate joint ventures with competitors may permit exceptions to these rules, as may bona fide purchases from or sales to competitors on non-competitive products, but the CFO and/or CEO must review all such proposed ventures in advance. These prohibitions are absolute and strict observance is required.

Collusion among competitors is illegal, and the consequences of a violation are severe.
Although the spirit of these laws, known as "antitrust," "competition," "consumer protection" or unfair competition laws, is straightforward, their application to particular situations can be quite complex. To ensure that the Corporation complies fully with these laws, each director, officer and employee should have a basic knowledge of them and should involve the CFO and/or CEO early on when questionable situations arise.

J. Industrial Espionage

It is the Corporation's policy to lawfully compete in the marketplace. This commitment to fairness includes respecting the rights of competitors and abiding by all applicable laws in the course of competing. The purpose of this policy is to maintain the Corporation's reputation as a lawful competitor and to help ensure the integrity of the competitive marketplace. The Corporation expects its competitors to respect the rights of the Corporation to compete lawfully in the marketplace, and the Corporation must respect the competitors' rights equally. Corporate directors, officers, employees, agents and contractors may not steal or unlawfully use the information, material, products, intellectual property, or proprietary or confidential information of anyone including suppliers, customers, business partners or competitors.

V. WAIVERS

Any waiver of any provision of this Code for a member of the Corporation's Board or an executive officer must be approved in writing by the Corporation's Board and promptly disclosed. Any waiver of any provision of this Code with respect any other employee, agent or contractor must be approved in writing by the CEO.

VI. DISCIPLINARY ACTIONS

The matters covered in this Code are of the utmost importance to the Corporation, its stockholders and its business partners, and are essential to the Corporation's ability to conduct its business in accordance with its stated values. The Corporation expects all of its directors, officers, employees, agents, contractors and consultants to adhere to these rules in carrying out their duties for the Corporation.

The Corporation will take appropriate action against any director, officer, employee, agent, contractor or consultant whose actions are found to violate these policies or any other policies of the Corporation. Disciplinary actions may include immediate termination of employment or business relationship at the Corporation's sole discretion. Where the Corporation has suffered a loss, it may pursue its remedies against the individuals or entities responsible. Where laws have been violated, the Corporation will cooperate fully with the appropriate authorities.

VII. ACKNOWLEDGMENT OF RECEIPT OF CODE OF BUSINESS CONDUCT AND ETHICS

I have received and read the Corporation's Code of Business Conduct and Ethics. I understand the standards and policies contained in the Code and understand that there may be additional policies or laws specific to my job. I further agree to comply with the Code.

If I have questions concerning the meaning or application of the Code, any Corporation policies, or the legal and regulatory requirements applicable to my job, I know I can consult my manager or the CFO or the CEO, knowing that my questions or reports to these sources will be maintained in confidence. I acknowledge that I may report violations of the Code to the CFO and/or CEO.

_____

Director, Officer or Employee Name

Date

Please sign and return this form to the CFO.

Company Seal:

R.R. Hawkins & Associates International, a Professional Corporation

DOMESTIC & INTERNATIONAL BUSINESS CONSULTING

A superior method to building big business..."

December 28, 2012

Office of the Chief Accountant
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Cactus Ventures, Inc.
File Reference No. 000-52446

Ladies and Gentlemen:

We were previously the independent registered public accounting firm for Cactus Ventures, Inc. (the "Registrant") and rendered an accountant's report on the financials statements of the Company for 2011-2010.

On or about December 27, 2012, the company discontinued our engagement as the independent registered public accounting firm of Denali Concrete Management, Inc. We have read Item 4.01(a) of the current report on Form 8-K dated December 28, 2012 of the Registrant and are in agreement with the statements contained therein. We have no basis to agree or disagree with other statements of the Registrant contained herein.

Very truly yours,
/s/ R.R.Hawkins and Associates International, a PC

11301 W. Olympic Blvd. # 714
Los Angeles, CA 90064
T: 310.553.5707 F: 310.553.5337
www.rrhawkins.com

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Financial Statements

As of December 31, 2011 and 2010 and
for the years ended December 31, 2011 and 2010 and
for the period from June 13, 2000 (inception) to December 31, 2011

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Newark, NJ

We have audited the accompanying consolidated balance sheets of Actinium Pharmaceuticals, Inc. (a Development Stage Company) (the "Company") as of December 31, 2011 and 2010, and the related consolidated statements of operations, changes in stockholders' equity and cash flows for the years then ended and for the period from June 13, 2000 (Inception) to December 31, 2011. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Actinium Pharmaceuticals, Inc. as of December 31, 2011 and 2010 and the results of their operations and their cash flows for the years then ended and for the period from June 13, 2000 (Inception) to December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has not generated any revenue since its inception, has a history of operating losses, and has an accumulated deficit since its inception. Those conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to those matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ GBH CPAs, PC
GBH CPAs, PC
www.gbhcpas.com
Houston, Texas
September 7, 2012

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Balance Sheets

	December 31, 2011	December 31, 2010
ASSETS		
Current assets:		
Cash	$ 5,703,798	$ 196,135
R&D reimbursement receivable	237,834	279,401
Prepaid expenses and other current assets	5,384	10,151
Deferred financing costs	252,248	-
Total current assets	6,199,264	485,687
Property and equipment, net	1,233	1,866
TOTAL ASSETS	$ 6,200,497	$ 487,553
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 644,511	$ 88,492
Convertible notes payable, net	124,363	-
Derivative liabilities	4,439,613	-
Total current liabilities	5,208,487	88,492
Commitments and contingencies		
Stockholders' equity:		
Preferred stock-Series A, $0.01 par value; 1,000,000 shares authorized; 1,000,000 shares issued and outstanding	10,000	10,000
Preferred stock-Series B, $0.01 par value; 4,711,247 shares authorized; 4,711,247 shares issued and outstanding	47,112	47,112
Preferred stock-Series C-1, $0.01 par value; 800,000 shares authorized; 800,000 shares issued and outstanding	8,000	8,000
Preferred stock-Series C-2, $0.01 par value; 666,667 shares authorized; 666,667 shares issued and outstanding	6,667	6,667
Preferred stock-Series C-3, $0.01 par value; 502,604 shares authorized; 502,604 shares issued and outstanding	5,026	5,026
Preferred stock-Series C-4, $0.01 par value; 4,250,000 shares authorized; 4,250,000 shares issued and outstanding	42,500	42,500
Preferred stock-Series D, $0.01 par value; 3,000,000 shares authorized; 3,000,000 shares issued and outstanding	30,000	30,000
Preferred stock-Series E, $0.01 par value; 30,000,000 shares authorized; 23,697,119 shares issued and outstanding	236,971	-
Common stock, $0.01 par value, 80,000,000 shares authorized; 2,407,805 shares issued and outstanding	24,078	24,078
Additional paid in capital	47,963,914	44,163,141
Deficit accumulated during development stage	(47,382,258)	(43,937,463)
Total stockholders' equity	992,010	399,061
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 6,200,497	$ 487,553

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statements of Operations

	For the Year Ended December 31,		For the Period from June 13, 2000 (Inception) to December 31, 2011
	2011	2010	
Revenues	$ -	$ -	$ -
Operating expenses:			
Research and development, net	323,788	93,117	22,980,034
General and administrative	2,959,246	561,970	19,998,743
Depreciation and amortization	633	72,101	3,261,881
Loss on disposition of equipment	-	-	550,186
Total operating expenses	3,283,667	727,188	46,790,844
Loss from operations	(3,283,667)	(727,188)	(46,790,844)
Other (income) expense:			
Interest expense	175,094	78	865,380
Gain on extinguishment of liability	-	(260,000)	(260,000)
Gain on change in fair value of derivative liabilities	(13,966)	-	(13,966)
Total other (income) expense	161,128	(259,922)	591,414
Net loss	$ (3,444,795)	$ (467,266)	$ (47,382,258)
Net loss per common share - basic and diluted	$ (1.43)	$ (0.19)	
Weighted average number of common shares outstanding - basic and diluted	2,407,805	2,407,805	

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

	Series A Preferred Stock		Series B Preferred Stock		Series C-1 Preferred Stock		Series C-2 Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Issuance of founder shares	-	$ -	-	$ -	-	$ -	-	$ -
Proceeds from issuance of Series A preferred	437,500	4,375	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2000	437,500	4,375	-	-	-	-	-	-
Proceeds from issuance of Series A preferred	562,500	5,625	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2001	1,000,000	10,000	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2002	1,000,000	10,000	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2003	1,000,000	10,000	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2004	1,000,000	10,000	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2005	1,000,000	10,000	-	-	-	-	-	-

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Series A Preferred Stock		Series B Preferred Stock		Series C-1 Preferred Stock		Series C-2 Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balances, December 31, 2005	1,000,000	$ 10,000	-	$ -	-	$ -	-	$ -
Conversion of common stock to preferred stock	-	-	-	-	800,000	8,000	666,667	6,667
Proceeds from issuance of Series B preferred	-	-	2,511,247	25,112	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2006	1,000,000	10,000	2,511,247	25,112	800,000	8,000	666,667	6,667
Proceeds from issuance of Series B preferred	-	-	2,200,000	22,000	-	-	-	-
Common stock issued for services	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2007	1,000,000	10,000	4,711,247	47,112	800,000	8,000	666,667	6,667
Proceeds from issuance of Series D preferred	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2008	1,000,000	10,000	4,711,247	47,112	800,000	8,000	666,667	6,667
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2009	1,000,000	10,000	4,711,247	47,112	800,000	8,000	666,667	6,667
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2010	1,000,000	10,000	4,711,247	47,112	800,000	8,000	666,667	6,667

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Series A Preferred Stock		Series B Preferred Stock		Series C-1 Preferred Stock		Series C-2 Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balances, December 31, 2010	1,000,000	$ 10,000	4,711,247	$ 47,112	800,000	$ 8,000	666,667	$ 6,667
Proceeds from issuance of Series E preferred	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Warrant expense	-	-	-	-	-	-	-	-
Fair value of derivative warrants	-	-	-	-	-	-	-	-
Beneficial conversion feature discount	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2011	1,000,000	$ 10,000	4,711,247	$ 47,112	800,000	$ 8,000	666,667	$ 6,667

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Series C-3 Preferred Stock		Series C-4 Preferred Stock		Series D Preferred Stock		Series E Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Issuance of founder shares	-	$ -	-	$ -	-	$ -	-	$ -
Proceeds from issuance of Series A preferred	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2000	-	-	-	-	-	-	-	-
Proceeds from issuance of Series A preferred	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2001	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2002	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2003	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2004	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2005	-	-	-	-	-	-	-	-

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Series C-3 Preferred Stock		Series C-4 Preferred Stock		Series D referred Stock		Series E Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balances, December 31, 2005	-	$ -	-	$ -	-	$ -	-	$ -
Conversion of common stock to preferred stock	502,604	5,026	4,250,000	42,500	-	-	-	-
Proceeds from issuance of Series B preferred	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2006	502,604	5,026	4,250,000	42,500	-	-	-	-
Proceeds from issuance of Series B preferred	-	-	-	-	-	-	-	-
Common stock issued for services	-	-	-	-	-	-	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2007	502,604	5,026	4,250,000	42,500	-	-	-	-
Proceeds from issuance of Series D preferred	-	-	-	-	3,000,000	30,000	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2008	502,604	5,026	4,250,000	42,500	3,000,000	30,000	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2009	502,604	5,026	4,250,000	42,500	3,000,000	30,000	-	-
Option expense	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2010	502,604	5,026	4,250,000	42,500	3,000,000	30,000	-	-

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Series C-3 Preferred Stock		Series C-4 Preferred Stock		Series D Preferred Stock		Series E Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balances, December 31, 2010	502,604	$ 5,026	4,250,000	$ 42,500	3,000,000	$ 30,000	-	$ -
Proceeds from issuance of Series E preferred	-	-	-	-	-	-	23,697,119	236,971
Option expense	-	-	-	-	-	-	-	-
Warrant expense	-	-	-	-	-	-	-	-
Fair value of derivative warrants	-	-	-	-	-	-	-	-
Beneficial conversion feature discount	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-
Balances, December 31, 2011	502,604	$ 5,026	4,250,000	$ 42,500	3,000,000	$ 30,000	23,697,119	$ 236,971

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount			
Issuance of founder shares	3,000,000	$ 30,000	$ -	$ -	$ 30,000
Proceeds from issuance of Series A preferred	-	-	1,745,625	-	1,750,000
Net loss	-	-	-	(672,286)	(672,286)
Balances, December 31, 2000	3,000,000	30,000	1,745,625	(672,286)	1,107,714
Proceeds from issuance of Series A preferred	-	-	2,244,375	-	2,250,000
Net loss	-	-	-	(5,090,621)	(5,090,621)
Balances, December 31, 2001	3,000,000	30,000	3,990,000	(5,762,907)	(1,732,907)
Proceeds from issuance of common stock	541,667	5,417	3,244,583	-	3,250,000
Net loss	-	-	-	(3,192,384)	(3,192,384)
Balances, December 31, 2002	3,541,667	35,417	7,234,583	(8,955,291)	(1,675,291)
Proceeds from issuance of common stock	627,604	6,276	6,774,974	-	6,781,250
Net loss	-	-	-	(3,532,044)	(3,532,044)
Balances, December 31, 2003	4,169,271	41,693	14,009,557	(12,487,335)	1,573,915
Proceeds from issuance of common stock	2,300,000	23,000	4,577,000	-	4,600,000
Net loss	-	-	-	(5,734,791)	(5,734,791)
Balances, December 31, 2004	6,469,271	64,693	18,586,557	(18,222,126)	439,124
Proceeds from issuance of common stock	1,950,000	19,500	3,880,500	-	3,900,000
Option expense	-	-	315,388	-	315,388
Net loss	-	-	-	(4,580,237)	(4,580,237)
Balances, December 31, 2005	8,419,271	84,193	22,782,445	(22,802,363)	74,275

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount			
Balances, December 31, 2005	8,419,271	$ 84,193	$ 22,782,445	$ (22,802,363)	$ 74,275
Conversion of common stock to preferred stock	(6,219,271)	(62,193)	-	-	-
Proceeds from issuance of Series B preferred	-	-	7,508,629	-	7,533,741
Proceeds from issuance of common stock	8,400	84	16,716	-	16,800
Option expense	-	-	252,308	-	252,308
Net loss	-	-	-	(6,053,362)	(6,053,362)
Balances, December 31, 2006	2,208,400	22,084	30,560,098	(28,855,725)	1,823,762
Proceeds from issuance of Series B preferred	-	-	6,578,000	-	6,600,000
Common stock issued for services	199,405	1,994	396,816	-	398,810
Option expense	-	-	255,061	-	255,061
Net loss	-	-	-	(5,617,581)	(5,617,581)
Balances, December 31, 2007	2,407,805	24,078	37,789,975	(34,473,306)	3,460,052
Proceeds from issuance of Series D preferred	-	-	5,970,000	-	6,000,000
Option expense	-	-	269,618	-	269,618
Net loss	-	-	-	(5,570,905)	(5,570,905)
Balances, December 31, 2008	2,407,805	24,078	44,029,593	(40,044,211)	4,158,765
Option expense	-	-	112,382	-	112,382
Net loss	-	-	-	(3,425,986)	(3,425,986)
Balances, December 31, 2009	2,407,805	24,078	44,141,975	(43,470,197)	845,161
Option expense	-	-	21,166	-	21,166
Net loss	-	-	-	(467,266)	(467,266)
Balances, December 31, 2010	2,407,805	24,078	44,163,141	(43,937,463)	399,061

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statement of Changes in Stockholders' Equity
For the Period From June 13, 2000 (Inception) to December 31, 2011

(Continued)

	Common Stock		Additional Paid-in	Deficit Accumulated During Development	Total Stockholders'
	Shares	Amount	Capital	Stage	Equity (Deficit)
Balances, December 31, 2010	2,407,805	$ 24,078	$ 44,163,141	$ (43,937,463)	$ 399,061
Proceeds from issuance of Series E preferred	-	-	5,142,396	-	5,379,367
Option expense	-	-	19,935	-	19,935
Warrant expense	-	-	2,153,442	-	2,153,442
Fair value of derivative warrants	-	-	(3,887,850)	-	(3,887,850)
Beneficial conversion feature discount	-	-	372,850	-	372,850
Net loss	-	-	-	(3,444,795)	(3,444,795)
Balances, December 31, 2011	2,407,805	$ 24,078	$ 47,963,914	$ (47,382,258)	$ 992,010

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statements of Cash Flows

	For the Year Ended December 31,		For the Period from June 13, 2000 (Inception) to December 31, 2011
	2011	2010	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (3,444,795)	$ (467,266)	$ (47,382,258)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation expense	2,173,377	21,166	3,828,110
Depreciation and amortization	633	72,101	3,261,881
Loss on disposition of equipment	-	-	550,186
Amortization of debt discount	124,363	-	124,363
Amortization of deferred financing costs	40,444	-	40,444
Gain on extinguishment of liability	-	(260,000)	(260,000)
Gain on change in fair value of the derivatives	(13,966)	-	(13,966)
Changes in operating assets and liabilities:			
R&D reimbursement receivable	41,567	52,461	(237,834)
Prepaid expenses and other current assets	4,766	(1,838)	(5,384)
Accounts payable and accrued expenses	556,019	(26,364)	904,510
Net cash used in operating activities	(517,592)	(609,740)	(39,189,948)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Payment made for patent rights	-	-	(3,000,000)
Purchases of property and equipment	-	-	(813,300)
Net cash used in investing activities	-	-	(3,813,300)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Borrowings on convertible debt, net	645,888	-	645,888
Sales of common stock, net of offering costs	-	-	18,548,050
Sales of preferred stock, net of offering costs	5,379,367	-	29,513,108
Net cash provided by financing activities	6,025,255	-	48,707,046
Net increase (decrease) in cash	5,507,663	(609,740)	5,703,798
Cash at beginning of period	196,135	805,875	-
Cash at end of period	$ 5,703,798	$ 196,135	$ 5,703,798
SUPPLEMENTAL CASH FLOWS INFORMATION:			
Cash paid for:			
Income tax	$ -	$ -	$ -
Interest	-	78	682
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Beneficial conversion feature discount	$ 372,850	$ -	$ 372,850
Conversion of common stock to preferred stock	-	-	62,193
Fair value of warrants issued with debt	377,150	-	377,150
Fair value of warrants issued with Series E preferred	3,887,850	-	3,887,850
Fair value of warrants issued to the placement agent	188,579	-	188,549

See accompanying summary of accounting policies and notes to consolidated financial statements.

Note 1 – Description of Business and Summary of Significant Accounting Policies

Nature of Business – Actinium Pharmaceuticals, Inc. (API), incorporated on June 13, 2000, is a biotechnology company committed to developing breakthrough therapies for life threatening diseases using its alpha particle immunotherapy (APIT) platform and other related and similar technologies. API, together with its wholly owned subsidiary, MedActinium, Inc. (MAI), (hereinafter referred to collectively as "API" or the "Company") has initiated collaborative efforts with large institutions to establish the proof of concept of alpha particle immunotherapy and has supported one Phase I/Il clinical trial and one Phase I clinical trial at Memorial Sloan-Kettering Cancer Center (MSKCC) under an MSKCC Physician Investigational New Drug Application. In 2012, the Company launched a multi-center corporate sponsored trial in acute myeloid leukemia (AML) patients. The Company's objective, through research and development, is to produce reliable cancer fighting products which utilize monoclonal antibodies linked with alpha particle emitters or other appropriate payloads to provide very potent targeted therapies. The initial clinical trials of the Company's compounds have been with patients having acute myeloid leukemia and it is believed that the Company's APIT platform will have wider applicability for different types of cancer where suitable monoclonal antibodies can be found.

Development Stage Company – API is considered a development stage company and has had no commercial revenue to date.

Principles of Consolidation – The consolidated financial statements include the Company's accounts and those of the Company's wholly owned subsidiary. All significant intercompany accounts and transactions have been eliminated.

Use of Estimates in Financial Statement Presentation – The preparation of these consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents – The Company considers all highly liquid accounts with original maturities of three months or less to be cash equivalents. Such balances are usually in excess of FDIC insured limits.

Property and Equipment – Machinery and equipment are recorded at cost and depreciated on a straight-line basis over estimated useful lives of five years. Furniture and fixtures are recorded at cost and depreciated on a straight-line basis over estimated useful lives of seven years. When assets are retired or sold, the cost and related accumulated depreciation are removed from the accounts, and any related gain or loss is reflected in operations. Repairs and maintenance expenditures are charged to operations.

Intangible Assets – The Company entered into a Product Development and Patent License Agreement with Abbott Biotherapeutics Corp. (formerly Facet Biotech, formerly known as Protein Design Labs) to secure exclusive rights to a specific antibody when conjugated with alpha emitting radioisotopes. Terms included a license fee payment, milestone payments, and royalty payments on future sales. The agreement ends at the later of (1) 12.5 years after the first sale or (2) when the patent expires. The patent rights are being amortized on the straight-line method over seven years. As of December 31, 2011 and 2010, the patent rights have been fully amortized.

Amortization expense for the years ended December 31, 2011 and 2010 was $0 and $71,429, respectively.

Impairment of Long-Lived Assets – Management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be realizable or at a minimum annually during the fourth quarter of the year. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset are compared to the asset's carrying value to determine if an impairment of such asset is necessary. The effect of any impairment would be to expense the difference between the fair value of such asset and its carrying value.

Derivatives – All derivatives are recorded at fair value and recorded on the balance sheet. Fair values for securities traded in the open market and derivatives are based on quoted market prices. Where market prices are not readily available, fair values are determined using market based pricing models incorporating readily observable market data and requiring judgment and estimates.

Fair Value of Financial Instruments – Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. A fair value hierarchy has been established for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

- Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

- Level 2 Inputs – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

- Level 3 Inputs – Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

The following tables set forth assets and liabilities measured at fair value on a recurring and non-recurring basis by level within the fair value hierarchy as of December 31, 2011. As required by ASC 820, financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels.

	Level 1	Level 2	Level 3	Total
Derivative liabilities	$ -	$ -	$ 4,439,613	$ 4,439,613

Financial instruments consist of cash and cash equivalents, accounts receivable, installments receivable, collateralized receivables, accounts payable and secured borrowings.

Income Taxes – The Company uses the asset and liability method in accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and income tax carrying amounts of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company reviews deferred tax assets for a valuation allowance based upon whether it is more likely than not that the deferred tax asset will be fully realized. A valuation allowance, if necessary, is provided against deferred tax assets, based upon management's assessment as to their realization.

Grant Proceeds – API received a cash grant of $244,479 in 2010 from the U.S. Internal Revenue Service for the expenses incurred in 2009 on the qualified therapeutic discovery project pursuant to the Protection and Affordable Care Credit. The grant was recorded by the Company as a reduction of R&D costs.

Research and Development Costs – Research and development costs are expensed as incurred.

Share-Based Payments – The Company estimates the fair value of each stock option award at the grant date by using the Black-Scholes option pricing model and common shares based on the last common stock valuation done by third party valuation expert of the Company's common stock on the date of the share grant. The fair value determined represents the cost for the award and is recognized over the vesting period during which an employee is required to provide service in exchange for the award. As share-based compensation expense is recognized based on awards ultimately expected to vest, the Company reduces the expense for estimated forfeitures based on historical forfeiture rates. Previously recognized compensation costs may be adjusted to reflect the actual forfeiture rate for the entire award at the end of the vesting period. Excess tax benefits, if any, are recognized as an addition to paid-in capital.

Earnings (Loss) Per Common Share – The Company provides basic and diluted earnings per common share information for each period presented. Basic earnings per common share is computed by dividing the net income available to common stockholders by the weighted average number of common shares outstanding during the reporting period. Diluted earnings per common share is computed by dividing the net income available to common stockholders, adjusted on an "if converted" basis, by the weighted average number of common shares outstanding plus dilutive securities. Since the Company has only incurred losses, basic and diluted net loss per share are the same. The potentially dilutive securities (options, warrants and convertible instruments) were excluded from the diluted loss per share calculation. For the year ended December 31, 2011, potentially issuable shares for stock options in the amount of 822,400 shares; warrants in the amount of 16,109,782 shares; convertible notes payable in the amount of 3,461,538 shares; and convertible preferred stock in the amount of 38,627,637 shares of common stock have been excluded from the calculation. For the year ended December 31, 2010, potentially issuable shares for stock options in the amount of 822,400 shares; and convertible preferred stock in the amount of 14,930,518 shares of common stock have been excluded from the calculation.

Recent Accounting Pronouncements – The Company does not expect that any recently issued accounting pronouncements will have a significant impact on the results of operations, financial position, or cash flows of the Company.

Subsequent Events – The Company's management reviewed all material events from December 31, 2011 through September 5, 2012 and there are no other material subsequent events to report.

Note 2 – Going Concern

As reflected in the accompanying financial statements, the Company has suffered recurring losses from operations since its inception. The Company has a net loss of $3,444,795 and net cash used in operations of $517,592 for the year ended December 31, 2011; and an accumulated deficit of $47,382,258 at December 31, 2011. In addition, the Company has not completed its efforts to establish a stable recurring source of revenues sufficient to cover its operating costs for the next twelve months. These factors raise substantial doubt regarding the Company's ability to continue as a going concern.

The ability of the Company to continue its operations is dependent on the successful execution of management's plans, which include the expectation of raising debt or equity based capital, with some additional funding from other traditional financing sources, including term notes, until such time that funds provided by operations are sufficient to fund working capital requirements. The Company may need to issue additional equity and incur additional liabilities with related parties to sustain the Company's existence although no commitments for funding have been made and no assurance can be made that such commitments will be available.

The Company is seeking to raise additional funds in 2012 through an alternative public offering in which there will be simultaneous closing of a financing and a reverse merger. The Company is planning on a $5-$15 million offering which will be initiated in September 2012. The Company will also prepare for a reverse merger into a publically traded shell company while financing is occurring and plans to effect the reverse merger transaction after an initial amount of financing has been raised. There is no assurance that the Company will complete a successful offering or effect a reverse merger. The completion of these activities are subject to a number of factors including, among others, the negotiation of terms for a reverse merger and management's determination of the feasibility of completing a transaction.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. These financial statements do not include any adjustments relating to the recovery of assets or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Note 3 – Related Party Transactions

Agreement with MSKCC: In 2010, General Atlantic Group Limited donated all of the equity shares of its wholly owned subsidiary, Actinium Holdings Ltd. (formerly named General Atlantic Investments Limited) to Memorial Sloan Kettering Cancer Center (MSKCC) a principal owner of the Company. On April 9, 2010, MSKCC agreed that certain of its related parties would forbear from collecting or otherwise enforcing certain obligations of the Company under the license and clinical trials agreements with those related parties, including outstanding obligations in the approximate amount of $260,000 and certain obligations arising during the forbearance period. Certain criteria that result in termination of the forbearance period include, but are not limited to, the earliest occurrence of the following events: (a) January 1, 2012; (b) the date on which the Company has raised a minimum of $3,000,000 in new equity financing in one or more equity financing transactions; (c) the dissolution, liquidation, winding-up, bankruptcy or insolvency of the Company: and (d) certain acquisition events with respect to the Company. The forbearance agreement ended on October 30, 2011, when the company raised new equity financing of $4,125,025.

MSKCC agreed, subject to certain conditions, to utilize the donated funds for certain clinical and preclinical programs and activities related to the Company's drug development and clinical study programs, including the payment of certain costs and expenses that would otherwise have been borne by the Company. The following is a summary of activities related to the MSKCC arrangements at December 31, 2011 and 2010:

	2011	2010
Qualified R&D costs incurred by API	$ 655,786	$ 528,319
Cash received from MSKCC	966,341	248,418

As of December 31, 2011 and 2010, the Company had reimbursement receivables for costs incurred of $237,834 and $279,401 from MSKCC, respectively.

Note 4 – Property and equipment

Property and equipment consisted of the following at December 31, 2011 and 2010:

	Lives	2011	2010
Office equipment	5 years	$ 153,804	$ 153,804
Furniture and fixture	7 years	1,292	1,292
Total property and equipment		155,096	155,096
Less: accumulated depreciation		(153,863)	(153,230)
Property and equipment		$ 1,233	$ 1,866

Depreciation expense for the years ended December 31, 2011 and 2010 was $633 and $672, respectively.

Note 5 – Convertible Notes

On December 27, 2011, the Company completed a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes ("Convertible Notes") in the amount of $900,000 and received net proceeds of $750,000. The convertible notes were issued at 83.33% of the principal amount resulting in an original issue discount of $150,000.The Convertible Notes mature one year from the date of issuance. Interest accrues at the rate of 8% per year on the outstanding principal amount, accrued semi-annually and to be paid at maturity.

The principal amount of the Convertible Notes and accrued interest are automatically converted to common stock at the earlier of: (1) the effective date of a Qualified Public Offering, (2) a Public Company Transaction, defined as (i) a reverse merger or similar transaction between the Company and a corporation whose securities are publicly traded in the United States or other jurisdiction mutually agreed between API and Placement Agent, or (ii) the quotation of the Company's securities for purchase and sale on a U.S. quotation service, or (iii) the filing with an applicable regulatory body which will result in the Company becoming an entity whose securities are traded on a public exchange in the U.S. or other mutually agreed upon jurisdiction, or (3) the acquisition or receipt by the Company of no less than $4,000,000 of gross proceeds in subsequent offerings of its common stock or equivalents following the issuance of Series E Preferred Stock(See Note 9) and the Convertible Notes.

In connection with the issuance of the Convertible Notes, Warrants to purchase a total of 862,050 shares of common stock were issued to investors. The Placement Agent and the Management Firm (See Note 9) were issued warrants to purchase 431,033 shares and 353,448 shares of common stock, respectively.

The Company analyzed the Convertible Notes and the Warrants for derivative accounting consideration under FASB ASC 470 and determined that the investor warrants and the placement agent warrants, with a grant date fair value of $565,729 (See Note 6), qualified for accounting treatment as a financial derivative (See Note 6) and the Convertible Notes were determined to also have a beneficial conversion feature discount of $372,850 resulting from the conversion price of $0.26 per share which is below the fair value of $0.37 per share on the date of the Convertible Notes.

The total fees, including cash payments and the fair value of the warrants issued to the Placement Agent, incurred in connection with the financing were $292,691. These fees will be amortized over the life (one year) of the Convertible Notes using the straight-line method as it approximates the effective interest method. The $150,000 original issue discount on the Convertible Notes will also be amortized over the life of the Notes on a straight line basis. During the year ended December 31, 2011, the Company recorded amortization expense related to the deferred financing costs and debt discount of $40,444 and $124,363, respectively.

A summary of the 8% Senior Subordinated Unsecured Convertible Promissory Notes as of December 31, 2011 is as follows:

Principal amount	$	900,000
Less: original issuance discount		(150,000)
Less: discount related to fair value of derivative warrants		(377,150)
Less: discount related to the beneficial conversion feature		(372,850)
Add: amortization of discount		124,363
Carrying value at December 31, 2011	$	124,363

Note 6 – Derivatives

The Company has determined that certain warrants the Company has issued contain provisions that protect holders from future issuances of the Company's common stock at prices below such warrants' respective exercise prices and these provisions could result in modification of the warrants' exercise price based on a variable that is not an input to the fair value of a "fixed-for-fixed" option as defined under FASB ASC Topic No. 815 – 40. The warrants issued in connection with the Series E Preferred Stock (See Note 9), the Convertible Notes (See Note 5) and the placement agent warrants contain anti-dilution provisions that provide for a reduction in the exercise price of such warrants in the event that future common stock (or securities convertible into or exercisable for common stock) is issued (or becomes contractually issuable) at a price per share (a "Lower Price") that is less than the exercise price of such warrant at the time. The amount of any such adjustment is determined in accordance with the provisions of the warrant agreement and depends upon the number of shares of common stock issued (or deemed issued) at the Lower Price and the extent to which the Lower Price is less than the exercise price of the warrant at the time.

Following is a summary of warrants the Company determined to be financial derivatives:

Warrants issued with convertible notes (See Note 5)	862,050
Placement agent warrants related to issuance of convertible notes (See Note 5)	431,033
Warrants issued with Series E Preferred Stock (See Note 9)	5,924,285
Placement agent warrants related to issuance of Series E Preferred Stock (See Note 9)	2,962,142
Total warrants issued	10,179,510

The fair value for these warrants of $4,453,579 was valued on the date of issuance and was classified as derivative liabilities. Revaluing the derivative at December 31, 2011 resulted in a decrease in the derivative liabilities of $13,966 with a corresponding unrealized gain on the derivative instruments.

	Initial valuation of derivative liabilities upon issuance of new warrants during the period	Decrease in fair value of derivative liabilities	Balance at December 31, 2011
Warrants issued with Series E P/S	$ 2,591,901	$ (8,294)	$ 2,583,607
Warrants issued with convertible notes	377,150	(1,207)	375,943
Placement agent warrants	1,484,528	(4,465)	1,480,063
Total	$ 4,453,579	$ (13,966)	$ 4,439,613

The following is a summary of the assumptions used in the modified lattice valuation model as of the initial valuations of the derivative warrant instruments issued during the years ended December 31, 2011:

	Initial valuation on October 5, 2011	December 31, 2011
Market value of common stock on measurement date (1)	$0.37	$0.37
Adjusted exercise price	$0.23 - $0.26	$0.24 - $0.26
Risk free interest rate (2)	1.45%	1.35%
Warrant lives in years	7 years	7 years
Expected volatility (3)	157%	156%
Expected dividend yield (4)	-	-
Probability of stock offering in any period over five years (5)	25%	25%
Range of percentage of existing shares offered (6)	35%	35%
Offering price range (7)	$0.13 - $0.56	$0.18 - $0.55

(1) The market value of common stock is based on the valuation performed by a third party valuation specialist as of December 31, 2011.
(2) The risk-free interest rate was determined by management using the 7-year Treasury Bill as of the respective Offering or measurement date.
(3) Because the Company does not have adequate trading history to determine its historical trading volatility, the volatility factor was estimated by management using the historical volatilities of comparable companies in the same industry and region.
(4) Management determined the dividend yield to be 0% based upon its expectation that it will not pay dividends for the foreseeable future.
(5) Management has determined that the probability of a stock offering is 100% in each of the next five years.
(6) Management estimates that the range of percentages of existing shares offered in each stock offering will be between 35% of the shares outstanding.
(7) Represents the estimated offering price range in future offerings as determined by management.

Note 7 – Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities at December 31, 2011 and 2010 are as follows:

	2011	2010
Deferred tax assets:		
Net operating losses	$ 13,089,314	$ 13,457,206
Share-based compensation	741,420	4,624
Other differences in tax basis	4,749	-
Total deferred tax assets	13,835,483	13,461,830
Less: valuation allowance	(13,835,483)	(13,461,830)
Deferred tax assets, net	$ -	$ -

As of December 31, 2011, for U.S. federal income tax reporting purposes, the Company has approximately $40,692,597 of unused net operating losses ("NOLs") available for carry forward to future years. The benefit from the carry forward of such NOLs will begin expiring during the year ended December 31, 2020. Because United States tax laws limit the time during which NOL carry forwards may be applied against future taxable income, the Company may be unable to take full advantage of its NOLs for federal income tax purposes should the Company generate taxable income. Further, the benefit from utilization of NOL carry forwards could be subject to limitations due to material ownership changes that could occur in the Company as it continues to raise additional capital. Based on such limitations, the Company has significant NOLs for which realization of tax benefits is uncertain.

The difference between the income tax provision and the amount that would result if the U.S. Federal statutory rate of 34% were applied to pre-tax income (loss) for the years ended December 31, 2011 and 2010 is as follows:

	For the year ended			
	December 31, 2011		December 31, 2010	
Federal income taxes at 34%	$ (1,171,230)	-34.00%	$ (158,870)	-34.00%
Share-based compensation costs	736,796	21.39%	4,625	0.99%
Change in fair value of derivatives	4,748	0.13%	-	-
Amortization of debt discounts	56,033	1.63%	-	-
Change in valuation allowance	373,653	10.85%	154,245	33.01%
Provision for income tax	$ -	-	$ -	-

Note 8 – Commitments and Contingencies

The Company has entered into license and research and development agreements with third parties under which the Company is obligated to make customary payments in the form of upfront payments as well as milestone and royalty payments. Notable inclusions in this category are:

a. Abbott Biotherapeutics Corp– The Company entered into a Product Development and Patent License Agreement with Abbott Biotherapeutics Corp. (formerly Facet Biotech formerly known as Protein Design Labs) in 2003 to secure exclusive rights to a specific antibody when conjugated with alpha emitting radioisotopes. Upon execution of the agreement, the Company made a license fee payment of $3,000,000.

The Company agreed to make milestone payments totaling $7,750,000 for the achievement of the following agreed to and contracted milestones:

Milestones	Payments
(1) when Company initiates a Phase I Clinical Trial of a licensed product	$ 750,000
(2) when Company initiates a Phase II Clinical Trial of a licensed product	750,000
(3) when Company initiates a Phase III Clinical Trial of a licensed product	1,500,000
(4) Biological License Application filing with U.S. FDA	1,750,000
(5) First commercial sale	1,500,000
(6) after the first $10,000,000 in net sales	1,500,000

Under the agreement, the Company shall pay to Abbott Biotherapeutics Corp on a country-by-country basis a royalty of 12% of net sales of all licensed products until the later of: (1) 12.5 years after the first commercial sale, or (2) when the patents expire.

As of June 30, 2012, the Company has met its first milestone and upon reaching the milestone. The Company paid Abbott Biotherapeutics Corp. a milestone payment of $750,000 in July 2012.

b. Memorial Sloan Kettering Cancer Center (“MSKCC”) –In February 2002, the Company entered into a license agreement with MSKCC that requires a technology access fee of $50,000 upon execution, an annual maintenance fee of $50,000 and an annual research funding of $50,000 for as long as the agreement is in force.

Milestones	Payments
(1) filing of an New Drug Application (“NDA”) or regulatory approval for each licensed product	$ 750,000
(2) upon the receipt of regulatory approval from the U.S. FDA for each licensed product	1,750,000

Under the agreement, the Company shall pay to MSKCC on a country-by-country basis a royalty of 2% of net sales of all licensed products until the later of: (1) 10 years from the first commercial sale, or (2) when the patents expire.

The Company expects to file the NDA for regulatory approval in 2015.

c. Oak Ridge National Laboratory (ORNL) – API has contracted to purchase radioactive material to be used for research and development through December 2012. API is contracted to purchase $233,100 of radioactive material to be used for research and development, with a renewal option at the contract end.

d. AptivSolutions provides project management services for the study of the drug Ac-225-HuM195 (Actimab-A) used in the Company clinical trials, Phase I and Phase II. The total project is estimated to cost $1,859,333 and requires a 12.5% down payment of the total estimated project cost. The down payment totaling $239,000 was paid in 2007 and 2012. AptivSolutions bills the Company when services are rendered.

The Company rents office space at 391 Lafayette Street, Newark, NJ. The agreement is on a month-to-month basis and requires a 45-day notice by either party to cancel.

Note 9 – Equity

Common Stock

At inception, the Company issued 3,000,000 shares of common stock at par value to the founding shareholders. During the period from January 1, 2002 through December 31, 2011, the Company issued 5,427,671 common shares for net proceeds of $18,548,050 after offering costs.

Since inception, the Company has issued 199,405 common shares for services valued at $398,810 in the aggregate based on the grant date fair value.

Also in 2006, 6,219,271 common shares were converted to Series C Preferred Stock on a one-to-one basis.

Preferred Stock

At December 31, 2011 and 2010, the Company had the following preferred stock outstanding:

	As of December 31, 2011		As of December 31, 2010	
Preferred Stock	No. of Shares	Price per share	No. of Shares	Price per share
Series A	1,000,000	$ 4.00	1,000,000	$ 4.00
Series B	4,711,247	3.00	4,711,247	3.00
Series C-1	800,000	4.00	800,000	4.00
Series C-2	666,667	6.00	666,667	6.00
Series C-3	502,604	12.00	502,604	12.00
Series C-4	4,250,000	2.00	4,250,000	2.00
Series D	3,000,000	2.00	3,000,000	2.00
Series E	23,697,119	0.26	-	0.26
	38,627,637		14,930,518	

Issuances:

Series A Preferred Stock: During 2000, the Company issued 437,500 shares for $1,750,000. During 2001, the Company issued 562,500 shares for $2,250,000.

Series B Preferred Stock: During 2006, the Company issued 2,511,247 shares for $7,533,741. During 2007, the Company issued 2,200,000 shares for $6,600,000.

Series C Preferred Stock: During 2006, the Company converted 6,219,271 shares of Common Stock on a one-to-one basis into 800,000 shares, 666,667 shares, 502,604 shares and 4,250,000 shares of Series C-1, Series C-2, Series C-3 and Series C-4 Preferred Stock, respectively.

Series D Preferred Stock: In 2008, the Company issued 3,000,000 shares for $6,000,000.

Series E Preferred Stock: During 2011, the Company raised $6,184,967 through an offering of 23,697,119 shares of the 2011 Series E preferred shares and 5,924,285 warrants. A net amount of $5,379,367 was received by the Company in 2011. Pursuant to the agreement, the Company paid Laidlaw & Company (UK) Ltd. ("Laidlaw & Co."), the placement agent, total cash fees of $742,196, which consisted of placement agent commission of $618,497 and expense reimbursement of $123,699. Warrants issued to the investors have a fair value of $2,591,901. The Company also issued Laidlaw & Co. warrants to purchase an aggregate of 2,962,142 shares of the Company's common stock, with an exercise price of $0.26 per share and a term of 7 years. These warrants were valued at their grant date fair value of $322,783. In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $60,904 for its services as the placement agent's legal counsel and Signature Bank $2,500 for the bank escrow fee.

Placement Agent – In connection with the offering of the 2011 Preferred Series E shares and the Convertible Notes and related warrants, Laidlaw & Co. and the Company entered into a placement agency agreement dated May 9, 2011, as amended July 12, 2011. With the money raised in 2011, the Company issued Laidlaw & Co. warrants to purchase an aggregate of 3,393,175 shares of common stock, with an exercise price of $0.26 per share.

Management Firm – In connection with the offering of the 2011 Preferred Series E shares and the Convertible Notes and related warrants, AmerAsia Inc. and the Company entered into a transaction management agreement dated May 9, 2011, as amended July 12, 2011. Whereby AmerAsia Inc. will provide consulting services to the Company related to the Company becoming an entity whose securities are publicly traded. Pursuant to this agreement, the Company will pay AmerAsia Inc. $12,500 per month until the Public Company transaction occurs. Thereafter, the transaction management agreement will continue for a minimum of three months. The management fee will accrue until such time that the Company secures financing. In 2011, the Company accrued $96,744 in management fees. In addition, the Company issued AmerAsia Inc. warrants to purchase an aggregate of 5,930,272 shares of common stock, with an exercise price of $0.01 per share. The warrants have a fair value of $2,153,442 (See Note 11) and included a cashless exercise provision.

At December 31, 2011, the Company has the following Preferred Stock authorized:

Preferred Stock	Authorized shares
Series A	1,000,000
Series B	4,711,247
Series C-1	800,000
Series C-2	666,667
Series C-3	502,604
Series C-4	4,250,000
Series D	3,000,000
Series E	30,000,000

Voting rights:

The holders of preferred shares are entitled to vote together with the holders of common stock and all other series and classes of the Company's capital stock. The holder of the Series D and E preferred shares are entitled to elect two directors of the Company.

Dividends:

The holders of the Series B, Series D and Series E shares are entitled to cumulative dividends, payable in cash, if declared by the Board, at a rate of 7% of the per share stated value of the Series B stock, Series D and Series E stock, respectively. These dividends shall accrue on an annual basis, commencing with the issue date of the respective Series.

The Company may not declare or pay dividends or other distributions with respect to any other class of stock, other than a dividend payable in shares of common stock in connection with an extraordinary stock event, until all accrued and unpaid Series E, then Series B and Series D have been paid.

If the Company declares and pays dividends or distributions on the common stock or Series B, D and E preferred stock, then, in that event, the holders of the preferred shares of Series A, C-1, C-2, C-3, and C-4 shall be entitled to share in such dividends or distributions on a pro-rata basis, as if their shares had been converted into common stock.

For purposes of calculating the diluted shares, Series A Preferred Stock is subject to a conversion rate to common shares of 1.337792 per Series A share.

Liquidation preferences:

Upon liquidation of the Company, the holders of preferred shares shall be entitled to be paid, out of the assets of the Company, a specified amount per share, as disclosed in the table below, plus all declared and unpaid dividends, if any, before-any payment or distribution is made to holders of Common Stock. The stock is listed in reverse order of liquidation preference. All preferred stock within a series has the same liquidation preference.

Preferred Stock	Liquidation Price per share
Series A	$ 2.99
Series B	3.00
Series C-1	4.00
Series C-2	6.00
Series C-3	12.00
Series C-4	2.00
Series D	2.00
Series E	0.26

Conversion:

The preferred shares are convertible into common stock, at the option of the holder, on a one-to-one basis, subject to certain adjustments for reorganization or reclassification of shares (as adjusted as provided in the Certificate of Incorporation, plus additional shares from accrued dividends to be converted into preferred shares at the following amounts per share (as adjusted as provided in the Certificate of Incorporation), or convert automatically under certain conditions such as an Initial Public Offering (as defined in the Certificate of Incorporation) or sale of the Company:

Preferred Stock	Conversion Price per share
Series A	$ 2.99
Series B	3.00
Series C-1	4.00
Series C-2	6.00
Series C-3	12.00
Series C-4	2.00
Series D	2.00
Series E	0.26

Note 10 – Stock Option Plan

The Company has adopted a 2003 Stock Plan under which it may grant up to 2,275,000 options to purchase common stock. The 2003 Stock Plan was amended in 2008 to increase the number of shares that it may grant up to 2,937,400. Option awards are generally granted with an exercise price equal to the market price of the Company's stock at the date of the grant. However, since the Company is not publicly traded, the fair market value of the stock represents the Board of Directors' best estimate, based on the information available, on the date of the grant. The awards generally vest over a four or five year period at a rate of approximately 2% per month.

In accordance with the terms of the Series E Preferred Stock financing, the stock option pool will be expanded to 15% of the total issued and outstanding shares as of the final closing of the Series E Preferred financing. The 2003 Stock Plan was amended to increase the number of shares by 3,217,880. Total shares reserved for issuance under the Plan will be increased to 6,155,280.

During 2006, options to purchase 618,800 shares of common stock were granted to several employees at an exercise price of $0.45 per share. These options have a term of 10 years and vest over a 4-5 year period. Fair value of $1,051,281was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 4.29% (2) expected life of 5 years, (3) expected volatility of 156%, and (4) zero expected dividends.

During 2007, options to purchase 340,000 shares of common stock were granted to several employees at an exercise price of $0.45 per share. These options have a term of 10 years and vest over a 4-5 year period. Fair value of $137,652 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 3.46% (2) expected life of 5 years, (3) expected volatility of 143%, and (4) zero expected dividends.

During 2008, options to purchase 210,034 shares of common stock were granted to an employee at an exercise price of $0.30 per share. These options have a term of 10 years and vest over a 4-5 year period. Fair value of $44,159 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 3.46% (2) expected life of 5 years, (3) expected volatility of 139%, and (4) zero expected dividends.

During 2009, 61,900 options to one employee were cancelled as the result of termination of the employment and 384,534 options to one employee were forfeited as the employee deceased during the year.

During the year of 2010, options to purchase 100,000 shares of common stock were granted to an employee at an exercise price of $0.30 per share. These options have a term of 10 years and vest over a 4-5 year period. Fair value of $24,996 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 2.16% (2) expected life of 5 years, (3) expected volatility of 171%, and (4) zero expected dividends.

The following is a summary of stock option activity for the years ended December 31, 2010 and 2011:

	Number of Units	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2009	722,400	$ 0.45	7.03	$ -
Granted	100,000	0.04	1.21	
Outstanding, December 31, 2010	822,400	0.43	6.51	-
Activities - none	-	-	-	
Outstanding, December 31, 2011	822,400	$ 0.43	5.51	$ -

All options issued and outstanding are being amortized over their respective vesting periods. The unrecognized compensation expense at December 31, 2011 was $1,133. During the years ended December 31, 2011 and 2010, the Company recorded option expense of $19,935 and $21,166, respectively.

Note 11 – Warrants

During the year ended December 31, 2011, warrants to purchase 5,930,272 shares of common stock were granted to the management firm at an exercise price of $0.01 per share. These warrants have a term of 7 years and vest immediately. Fair value of $2,153,442 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate ranging from 1.92% to 3.17%, (2) warrant life of 10 years, (3) expected volatility ranging from 64.77% to 70.72%, and (4) zero expected dividends. The management firm receives warrants equal to ten (10%) percent of the issued and outstanding capital stock of the Company on a fully-diluted basis on the effective date of the agreement. The warrants are subject to weighted average non-dilution provisions to be calculated on the basis of the post-money fully diluted capitalization of the Company upon closing of any transaction, financing or otherwise, up to and including the Public Company transaction, provided that such anti-dilution provisions shall not extend beyond the date of any exercise of the warrants by the management firm prior to the closing of the Public Company transaction.

Since these warrants vest immediately, the Company recorded the entire fair value of $2,153,442 as stock-based compensation expense during the year on these warrants issued by the Company.

During the year ended December 31, 2011, the Company also issued the following warrants:

Warrants issued with convertible notes (See Note 5)	862,050
Placement agent warrants related to issuance of convertible notes (See Note 5)	431,033
Warrants issued with Series E Preferred Stock (See Note 9)	5,924,285
Placement agent warrants related to issuance of Series E Preferred Stock (See Note 9)	2,962,142
Total warrants issued	10,179,510

The following is a summary of warrant activities for the year ended December 31, 2011:

	Number of Units	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
		$ -	-	
Outstanding, December 31, 2010	-			$ -
Granted	16,109,782	0.17	6.76	
Outstanding, December 31, 2011	16,109,782	$ 0.17	6.76	$ 3,261,367

Note 12 – Employee Defined Contribution Plan

In 2004, the Company established an employee deferred contribution plan. The plan requires 12 consecutive months of service and a minimum of 500 hours of service for participation. The Plan provides for employer matching of 50% of the employee contribution and discretionary contributions. Employees can contribute up to the maximum allowable under the Internal Revenue Service Code Section 401(k). The amount contributed by the Company for the years ended December 31, 2011 and 2010 was $8,885 and $8,250, respectively.

Note 13 – Subsequent Events

In January 2012, the Company re-priced 822,400 units of employee stock options to reflect the current per share fair market value of the Company's Common Stock. The exercise prices of all of the current outstanding stock options were reduced to $0.26 per share. The Company recorded an incremental compensation cost of $34,879 as the result of the re-pricing of options.

On January 31, 2012, the Company closed its last round of funding related to the offering of the 2011 Series E preferred shares. A net amount of $660,163 was received by the Company in 2012. Pursuant to the agreement, the Company paid Laidlaw & Co., the placement agent, total cash fees of $91,116. The Company also issued Laidlaw & Co. warrants to purchase an aggregate of 346,251 shares of the Company's common stock, with an exercise price of $0.26 per share and a term of 7 years. These warrants were valued at their grant date fair value of $477,131.In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $8,021 for its services as the placement agent's legal counsel.

On June 15, 2012, the Company entered into a license and sponsored research agreement with Fred Hutchinson Cancer Research Center (FHCRC). The Company will build upon previous and ongoing clinical trials, with BC8 (licensed antibody) and eventually develop a clinical trial with Actinium 225. FHCRC has currently completed Phase I and Phase II of the clinical trial and the Company intends to start preparation for a pivotal trial leading an FDA approval. The Company has been granted exclusive rights to the BC8 antibody and related master cell bank developed by FHCRC. The cost to develop the trial will range from $13.2 million to $23.5 million, depending on the trial design as required by the FDA. Under the terms of the sponsored research agreement, the Company will fund the FHCRC lab with $150,000 per year for the first two years and $250,000 thereafter. Payments made toward funding the lab will be credited toward royalty payments owed to FHCRC in the given year. A milestone payment of $1 million will be due to FHCRC upon FDA approval of the first drug. Upon commercial sale of the drug, royalty payments of 2% of net sales will be due to FHCRC.

In July and August 2012, options to purchase 4,450,000 shares of common stock were granted to three employees for their services. These options have an exercise price ranging from $0.26 to $0.50 per share and a grant date fair value of $1,100,116. Fair Value was calculated using the Black-Scholes option-pricing model. These options have a term of 10 years and vest over a 4-5 year period.

Subsequent to June 30, 2012, warrants to purchase 1,075,013 shares of common stock were granted to several consultants for services. These warrants have an exercise price ranging from $0.26 to $0.50 per share and a grant date fair value of $283,817. Fair Value was calculated using the Black-Scholes option-pricing model. These options have a term of 7 to 10 years and vest over a 4-5 year period.

The Company's management reviewed all material events from December 31, 2011 through September 7, 2012 and there are no other material subsequent events to report.

Exhibit 99.2

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Financial Statements

As of September 30, 2012 and December 31, 2011 and
for the Nine Months Ended September 30, 2012 and 2011 and
for the period from June 13, 2000 (inception) to September 30, 2012

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Balance Sheets
(Unaudited)

	September 30, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash	$ 2,566,669	$ 5,703,798
R&D reimbursement receivable	187,765	237,834
Prepaid expenses and other current assets	41,066	5,384
Deferred financing costs	32,523	252,248
Total current assets	2,828,023	6,199,264
Property and equipment, net	2,616	1,233
TOTAL ASSETS	$ 2,830,639	$ 6,200,497
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable and accrued expenses	$ 576,624	$ 403,011
Accounts payable – related party	243,600	241,500
Convertible notes payable, net	802,479	124,363
Derivative liabilities	5,204,348	4,439,613
Total current liabilities	6,827,051	5,208,487
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock-Series A, $0.01 par value; 1,000,000 shares authorized; 1,000,000 shares issued and outstanding	10,000	10,000
Preferred stock-Series B, $0.01 par value; 4,711,247 shares authorized; 4,711,247 shares issued and outstanding	47,112	47,112
Preferred stock-Series C-1, $0.01 par value; 800,000 shares authorized; 800,000 shares issued and outstanding	8,000	8,000
Preferred stock-Series C-2, $0.01 par value; 666,667 shares authorized; 666,667 shares issued and outstanding	6,667	6,667
Preferred stock-Series C-3, $0.01 par value; 502,604 shares authorized; 502,604 shares issued and outstanding	5,026	5,026
Preferred stock-Series C-4, $0.01 par value; 4,250,000 shares authorized; 4,250,000 shares issued and outstanding	42,500	42,500
Preferred stock-Series D, $0.01 par value; 3,000,000 shares authorized; 3,000,000 shares issued and outstanding	30,000	30,000
Preferred stock-Series E, $0.01 par value; 30,000,000 shares authorized; 26,606,306 and 23,697,119 shares issued and outstanding, respectively	266,061	236,971
Common stock, $0.01 par value, 80,000,000 shares authorized; 2,407,805 shares issued and outstanding	24,078	24,078
Additional paid-in capital	48,430,356	47,963,914
Deficit accumulated during development stage	(52,866,212)	(47,382,258)
Total stockholders' equity (deficit)	(3,996,412)	992,010
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)	$ 2,830,639	$ 6,200,497

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statements of Operations
(Unaudited)

	For the Nine Months Ended September 30,		For the Period from June 13, 2000 (Inception) to September 30, 2012
	2012	2011	
Revenues	$ -	$ -	$ -
Operating expenses:			
Research and development, net	2,723,459	231,640	25,703,493
General and administrative	1,520,221	376,748	21,518,964
Depreciation and amortization	429	477	3,262,310
Loss on disposition of equipment	-	-	550,186
Total operating expenses	4,244,109	608,865	51,034,953
Loss from operations	(4,244,109)	(608,865)	(51,034,953)
Other (income) expense:			
Interest expense	952,241	-	1,817,621
Gain on extinguishment of liability	-	-	(260,000)
Change in fair value of derivative liabilities	287,604	-	273,638
Total other (income) expense	1,239,845	-	1,831,259
Net loss	$ (5,483,954)	$ (608,865)	$ (52,866,212)
Net loss per common share - basic and diluted	$ (2.28)	$ (0.25)	
Weighted average number of common shares outstanding - basic and diluted	2,407,805	2,407,805	

See accompanying summary of accounting policies and notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(A Development Stage Company)
Consolidated Statements of Cash Flows
(Unaudited)

	For the Nine Months Ended September 30,		For the Period from June 13, 2000 (Inception) to
	2012	2011	September 30, 2012
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (5,483,954)	$ (608,865)	$ (52,866,212)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Stock-based compensation expense	312,500	14,951	4,140,610
Depreciation and amortization	429	477	3,262,310
Loss on disposition of equipment	-	-	550,186
Amortization of debt discount	678,116	-	802,479
Amortization of deferred financing costs	219,725	-	260,169
Gain on extinguishment of liability	-	-	(260,000)
Change in fair value of derivatives liabilities	287,604	-	273,638
Changes in operating assets and liabilities:			
R&D reimbursement receivable	50,068	401,161	(187,766)
Prepaid expenses and other current assets	(35,682)	4,517	(41,066)
Accounts payable and accrued expenses	173,614	(22,526)	836,624
Accounts payable – related party	2,100	241,500	243,600
Net cash provided by (used in) operating activities	(3,795,480)	31,215	(42,985,428)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Payment made for patent rights	-	-	(3,000,000)
Purchases of property and equipment	(1,812)	-	(815,112)
Net cash used in investing activities	(1,812)	-	(3,815,112)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Borrowings on convertible debt, net	-	-	645,888
Sales of common stock, net of offering costs	-	-	18,548,050
Sales of preferred stock, net of offering costs	660,163	-	30,173,271
Net cash provided by financing activities	660,163	-	49,367,209
Net increase (decrease) in cash	(3,137,129)	31,215	2,566,669
Cash at beginning of period	5,703,798	196,135	-
Cash at end of period	$ 2,566,669	$ 227,350	$ 2,566,669
SUPPLEMENTAL CASH FLOWS INFORMATION:			
Cash paid for:			
Income tax	$ -	$ -	$ -
Interest	-	-	682
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Beneficial conversion feature discount	$ -	$ -	$ 372,850
Conversion of common stock to preferred stock	-	-	62,193
Fair value of warrants issued with debt	-	-	377,150
Fair value of warrants issued with Series E preferred	318,117	-	4,205,967
Fair value of warrants issued to the placement agent	159,044	-	347,593

See accompanying summary of accounting policies and notes to consolidated financial statements.

Note 1 – Description of Business and Summary of Significant Accounting Policies

Nature of Business – Actinium Pharmaceuticals, Inc. (API), incorporated on June 13, 2000, is a biotechnology company committed to developing breakthrough therapies for life threatening diseases using its alpha particle immunotherapy (APIT) platform and other related and similar technologies. API, together with its wholly owned subsidiary, MedActinium, Inc. (MAI), (hereinafter referred to collectively as "API" or the "Company") has initiated collaborative efforts with large institutions to establish the proof of concept of alpha particle immunotherapy and has supported one Phase I/Il clinical trial and one Phase I clinical trial at Memorial Sloan-Kettering Cancer Center (MSKCC) under an MSKCC Physician Investigational New Drug Application. In 2012, the Company launched a multi-center corporate sponsored trial in acute myeloid leukemia (AML) patients. The Company's objective, through research and development, is to produce reliable cancer fighting products which utilize monoclonal antibodies linked with alpha particle emitters or other appropriate payloads to provide very potent targeted therapies. The initial clinical trials of the Company's compounds have been with patients having acute myeloid leukemia and it is believed that the Company's APIT platform will have wider applicability for different types of cancer where suitable monoclonal antibodies can be found.

Basis of Presentation – The accompanying unaudited interim consolidated financial statements as of September 30, 2012, for the nine months ended September 30, 2012 and 2011 and for the period from June 13, 2000 (inception) to September 30, 2012 have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") for interim consolidated financial information on the same basis as the annual audited consolidated financial statements. The consolidated financial statements as of and for the nine months ended September 30, 2012 and 2011 are unaudited. In the opinion of the management, these consolidated financial statements included all adjustments, which, unless otherwise disclosed, are of a normal recurring nature, necessary for a fair presentation of the financial position, results of operations, and cash flows for the period presented.

The results for interim periods are not necessary indicative of results for the entire year. The consolidated balance sheet at December 31, 2011 has been derived from audited consolidated financial statements; however, the notes to the consolidated financial statements do not include all of the information and notes required by accounting principles generally accepted in the United States of America for complete financial statements. The accompanying unaudited interim consolidated financial statements should be read in conjunction with the consolidated financial statements and noted thereto included in the audited consolidated financial statements presented elsewhere herein.

Development Stage Company – API is considered a development stage company and has had no commercial revenue to date.

Principles of Consolidation – The consolidated financial statements include the Company's accounts and those of the Company's wholly owned subsidiary. All significant intercompany accounts and transactions have been eliminated.

Use of Estimates in Financial Statement Presentation – The preparation of these consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents – The Company considers all highly liquid accounts with original maturities of three months or less to be cash equivalents. Such balances are usually in excess of FDIC insured limits.

Property and Equipment – Machinery and equipment are recorded at cost and depreciated on a straight-line basis over estimated useful lives of five years. Furniture and fixtures are recorded at cost and depreciated on a straight-line basis over estimated useful lives of seven years. When assets are retired or sold, the cost and related accumulated depreciation are removed from the accounts, and any related gain or loss is reflected in operations. Repairs and maintenance expenditures are charged to operations.

Intangible Assets – The Company entered into a Product Development and Patent License Agreement with Abbott Biotherapeutics Corp. (formerly Facet Biotech, formerly known as Protein Design Labs) to secure exclusive rights to a specific antibody when conjugated with alpha emitting radioisotopes. Terms included a license fee payment, milestone payments, and royalty payments on future sales. The agreement ends at the later of (1) 12.5 years after the first sale or (2) when the patent expires. The patent rights are being amortized on the straight-line method over seven years. As of September 30, 2012 and December 31, 2011, the patent rights have been fully amortized. There were no amortization expenses for the nine months ended September 30, 2012 and 2011.

Impairment of Long-Lived Assets – Management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be realizable or at a minimum annually during the fourth quarter of the year. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset are compared to the asset's carrying value to determine if an impairment of such asset is necessary. The effect of any impairment would be to expense the difference between the fair value of such asset and its carrying value.

Derivatives – All derivatives are recorded at fair value and recorded on the balance sheet. Fair values for securities traded in the open market and derivatives are based on quoted market prices. Where market prices are not readily available, fair values are determined using market based pricing models incorporating readily observable market data and requiring judgment and estimates.

Fair Value of Financial Instruments – Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. A fair value hierarchy has been established for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

- Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

- Level 2 Inputs – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

- Level 3 Inputs – Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

The following tables set forth assets and liabilities measured at fair value on a recurring and non-recurring basis by level within the fair value hierarchy as of September 30, 2012 and December 31, 2011. As required by ASC 820, financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels.

	Level 1	Level 2	Level 3	Total
Derivative liabilities				
At September 30, 2012	$ -	$ -	$ 5,204,348	$ 5,204,348
At December 31, 2011	-	-	4,439,613	4,439,613

Financial instruments consist of cash and cash equivalents, accounts payable and secured borrowings.

Income Taxes – The Company uses the asset and liability method in accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and income tax carrying amounts of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company reviews deferred tax assets for a valuation allowance based upon whether it is more likely than not that the deferred tax asset will be fully realized. A valuation allowance, if necessary, is provided against deferred tax assets, based upon management's assessment as to their realization.

Research and Development Costs – Research and development costs are expensed as incurred.

Share-Based Payments – The Company estimates the fair value of each stock option award at the grant date by using the Black-Scholes option pricing model and common shares based on the last common stock valuation done by third party valuation expert of the Company's common stock on the date of the share grant. The fair value determined represents the cost for the award and is recognized over the vesting period during which an employee is required to provide service in exchange for the award. As share-based compensation expense is recognized based on awards ultimately expected to vest, the Company reduces the expense for estimated forfeitures based on historical forfeiture rates. Previously recognized compensation costs may be adjusted to reflect the actual forfeiture rate for the entire award at the end of the vesting period. Excess tax benefits, if any, are recognized as an addition to paid-in capital.

Earnings (Loss) Per Common Share – The Company provides basic and diluted earnings per common share information for each period presented. Basic earnings (loss) per common share is computed by dividing the net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the reporting period. Diluted earnings per common share is computed by dividing the net income available to common stockholders, adjusted on an "if converted" basis, by the weighted average number of common shares outstanding plus dilutive securities. Since the Company has only incurred losses, basic and diluted net loss per common share are the same. The potentially dilutive securities (options, warrants and convertible instruments) were excluded from the diluted loss per common share calculation. For the nine months ended September 30, 2012, potentially issuable shares for stock options in the amount of 5,912,400 shares; warrants in the amount of 17,600,733 shares; convertible notes payable in the amount of 3,461,538 shares; and convertible preferred stock in the amount of 41,536,824 shares of common stock have been excluded from the calculation. For the nine months ended September 30, 2011, potentially issuable shares for stock options in the amount of 822,400 shares; and convertible preferred stock in the amount of 14,930,518 shares of common stock have been excluded from the calculation.

Recent Accounting Pronouncements – The Company does not expect that any recently issued accounting pronouncements will have a significant impact on the results of operations, financial position, or cash flows of the Company.

Subsequent Events – The Company's management reviewed all material events from September 30, 2012 through December 31, 2012 and there are no other material subsequent events to report.

Note 2 – Going Concern

As reflected in the accompanying financial statements, the Company has suffered recurring losses from operations since its inception. The Company has a net loss of $5,483,954 and net cash used in operations of $3,780,980 for the nine months ended September 30, 2012; and an accumulated deficit of $52,866,212 at September 30, 2012. In addition, the Company has not completed its efforts to establish a stable recurring source of revenues sufficient to cover its operating costs for the next twelve months. These factors raise substantial doubt regarding the Company's ability to continue as a going concern.

The ability of the Company to continue its operations is dependent on the successful execution of management's plans, which include the expectation of raising debt or equity based capital, with some additional funding from other traditional financing sources, including term notes, until such time that funds provided by operations are sufficient to fund working capital requirements. The Company may need to issue additional equity and incur additional liabilities with related parties to sustain the Company's existence although no commitments for funding have been made and no assurance can be made that such commitments will be available.

The Company is seeking to raise additional funds in 2012 through an alternative public offering in which there will be simultaneous closing of a financing and a reverse merger. The Company planed a $5-$15 million offering which was initiated on October 1, 2012 and has received $5,151,450 through December 31, 2012. Currently the offering is ongoing. The Company will also prepare for a reverse merger into a publicly traded shell company while financing is occurring and plans to effect the reverse merger transaction after an initial amount of financing has been raised. There is no assurance that the Company will complete a successful offering or effect a reverse merger. The completion of these activities are subject to a number of factors including, among others, the negotiation of terms for a reverse merger and management's determination of the feasibility of completing a transaction.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. These financial statements do not include any adjustments relating to the recovery of assets or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Note 3 – Related Party Transactions

Agreement with MSKCC: In 2010, General Atlantic Group Limited donated all of the equity shares of its wholly owned subsidiary, Actinium Holdings Ltd. (formerly named General Atlantic Investments Limited) to Memorial Sloan Kettering Cancer Center (MSKCC), a principal owner of the Company. On April 9, 2010, MSKCC agreed that certain of its related parties would forbear from collecting or otherwise enforcing certain obligations of the Company under the license and clinical trials agreements with those related parties, including outstanding obligations in the approximate amount of $260,000 and certain obligations arising during the forbearance period. Certain criteria that result in termination of the forbearance period include, but are not limited to, the earliest occurrence of the following events: (a) January 1, 2012; (b) the date on which the Company has raised a minimum of $3,000,000 in new equity financing in one or more equity financing transactions; (c) the dissolution, liquidation, winding-up, bankruptcy or insolvency of the Company: and (d) certain acquisition events with respect to the Company. The forbearance agreement ended on October 30, 2011, when the Company raised new equity financing of $4,125,025.

MSKCC agreed, subject to certain conditions, to utilize the donated funds for certain clinical and preclinical programs and activities related to the Company's drug development and clinical study programs, including the payment of certain costs and expenses that would otherwise have been borne by the Company. The following is a summary of activities related to the MSKCC arrangements for the nine month ended September 30, 2012 and 2011:

	September 30, 2012	September 30, 2011
Qualified R&D costs incurred by API	$ -	$ 761,086
Cash received from MSKCC	-	966,341

In 2011, the Company received total R&D prepayments of $299,200 from MSKCC.

As of September 30, 2012, the Company had net payable of $55,835 to MSKCC. As of December 31, 2011, the Company had a net receivable of $237,834 from MSKCC.

Note 4 – Property and Equipment

Property and equipment consisted of the following at September 30, 2012 and December 31, 2011:

	Lives	September 30, 2012	December 31, 2011
Office equipment	5 years	$ 154,324	$ 153,804
Furniture and fixture	7 years	1,292	1,292
Total property and equipment		155,616	155,096
Less: accumulated depreciation		(153,000)	(153,863)
Property and equipment		$ 2,616	$ 1,233

Depreciation expense for the nine months ended September 30, 2012 and 2011 was $429 and $477, respectively.

Note 5 – Convertible Notes

On December 27, 2011, the Company completed on a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes ("Convertible Notes") in the amount of $900,000 and received net proceeds of $750,000. The convertible notes were issued at 83.33% of the principal amount resulting in an original issue discount of $150,000.The Convertible Notes mature one year from the date of issuance. Interest accrues at the rate of 8% per year on the outstanding principal amount, accrued semi-annually and to be paid at maturity.

The principal amount of the Convertible Notes and accrued interest are automatically converted to common stock at the earlier of: (1) the effective date of a Qualified Public Offering,(2) a Public Company Transaction, defined as (i) a reverse merger or similar transaction between the Company and a corporation whose securities are publicly traded in the United States or other jurisdiction mutually agreed between API and Placement Agent, or (ii) the quotation of the Company's securities for purchase and sale on a U.S. quotation service, or (iii) the filing with an applicable regulatory body which will result in the Company becoming an entity whose securities are traded on a public exchange in the U.S. or other mutually agreed upon jurisdiction, or (3) the acquisition or receipt by the Company of no less than $4,000,000 of gross proceeds in subsequent offerings of its common stock or equivalents following the issuance of Series E Preferred Stock(See Note 9) and the Convertible Notes. On October 23, 2012, the Company issued a modification to the note holders whereby the Company is seeking approval to extend the note maturity date for 90 days. As of December 31, 2012, the Company was able to obtain approvals from 22 of the 24 note holders and the maturity date of the notes has been extended to January 31, 2013, February 18, 2013 or March 27, 2013 for the 22 notes. Currently, the Company is still negotiating with 2 note holders to extend the maturity date of the notes to March 27, 2013.

In connection with the issuance of the Convertible Notes, Warrants to purchase a total of 862,050 shares of common stock were issued to investors. The Placement Agent and the Management Firm (See Note 9) were issued warrants to purchase 363,646 shares and 400,013 shares of common stock, respectively. The warrants issued to the Placement Agent are exercisable at $0.26 per share and expire on January 31, 2019. The warrants issued to the Management Firm are exercisable at $0.01 per share and expire on January 31, 2019.

The Company analyzed the Convertible Notes and the Warrants for derivative accounting consideration under FASB ASC 470 and determined that the investor warrants and the placement agent warrants, with a grant date fair value of $565,729 (See Note 6), qualified for accounting treatment as a financial derivative (See Note 6) and the Convertible Notes were determined to also have a beneficial conversion feature discount of $372,850 resulting from the conversion price of $0.26 per share which is below the fair value of $0.37 per share on the date of the Convertible Notes.

The total fees, including cash payments and the fair value of the warrants issued to the Placement Agent, incurred in connection with the financing were $292,691. These fees will be amortized over the life (one year) of the Convertible Notes using the straight-line method as it approximates the effective interest method. The $150,000 original issue discount on the Convertible Notes will also be amortized over the life of the Notes on a straight line basis. During the nine months ended September 30, 2012, the Company recorded amortization expense related to the deferred financing costs and the debt discount of $219,725 and $678,116, respectively.

A summary of the 8% Senior Subordinated Unsecured Convertible Promissory Notes as of September 30, 2012 December 31, 2011 are as follows:

	September 30, 2012	December 31, 2011
Principal amount	$ 900,000	$ 900,000
Less: original issuance discount	(150,000)	(150,000)
Less: discount related to fair value of derivative warrants	(377,150)	(377,150)
Less: discount related to the beneficial conversion feature	(372,850)	(372,850)
Add: amortization of discount	802,479	124,363
Carrying value	$ 802,479	$ 124,363

Note 6 – Derivatives

The Company has determined that certain warrants the Company has issued contain provisions that protect holders from future issuances of the Company's common stock at prices below such warrants' respective exercise prices and these provisions could result in modification of the warrants exercise price based on a variable that is not an input to the fair value of a "fixed-for-fixed" option as defined under FASB ASC Topic No. 815 – 40.

The warrants issued in connection with the Series E Preferred Stock Offerings ("Series E"), the Convertible Notes and the Laidlaw warrants contain anti-dilution provisions that provide for a reduction in the exercise price of such warrants in the event that future common stock (or securities convertible into or exercisable for common stock) is issued (or becomes contractually issuable) at a price per share (a "Lower Price") that is less than the exercise price of such warrant at the relevant time. The amount of any such adjustment is determined in accordance with the provisions of the relevant warrant agreement and depends upon the number of shares of common stock issued (or deemed issued) at the Lower Price and the extent to which the Lower Price is less than the exercise price of the warrant at the relevant time.

The fair values of the warrants issued in the Series E Offerings, the Convertible Notes Offering and the Laidlaw warrants were recognized as derivative warrant instruments at issuance and are measured at fair value at each reporting period. The Company determined the fair values of these warrants using a modified binomial valuation model.

Activities for derivative warrant instruments during the nine months ended September 30, 2012 were as follows:

	Series E Preferred Stock Offering warrants		Convertible Notes Offering Warrants		Placement Agent Warrants		Total Derivative Warrants	
	Units	Fair value	Units	Fair value	Units	Fair value	Units	Fair value
At December 31, 2011	5,924,285	$ 2,583,604	862,050	$375,946	3,393,175	$ 1,480,063	10,179,510	$ 4,439,613
Additional issuances	727,292	318,088	-	-	363,646	159,043	1,090,938	477,131
Value change	-	169,917	-	22,009	-	95,678	-	287,604
At September 30, 2012	6,651,577	$ 3,071,609	862,050	$397,955	3,756,821	$ 1,724,784	11,270,448	$ 5,204,348

The fair values of the derivative warrants were calculated using a modified binomial valuation model with the following assumptions at each balance sheet date and the date for the new grants in January 2012:

	December 31, 2011	January 31, 2012	September 30 2012
Market value of common stock on measurement date	$ 0.37(1)	$ 0.37	$ 0.39
Adjusted exercise price	$0.24 - $0.26	$0.23 - $0.26	$0.23 - $0.26
Risk free interest rate (2)	1.35%	1.24%	0.83%
Warrant lives in years	7 years	7 years	6.1 – 6.3 years
Expected volatility (3)	156%	157%	161%
Expected dividend yield (4)	-	-	-
Probability of stock offering in any period over five years (5)	25%	25%	25%
Range of percentage of existing shares offered (6)	35%	35%	35%
Offering price range (7)	$0.18 - $0.55	$0.13 - $0.56	$0.12 - $0.55

(1) The market value of common stock is based on the valuation performed by third party valuation specialist as of December 31, 2011 and January 31, 2012. The market value of common stock as of September 30, 2012 is based on stock price of the most current common stock offering.

(2) The risk-free interest rate was determined by management using the 7 year Treasury Bill as of the respective Offering or measurement date.

(3) Because the Company does not have adequate trading history to determine its historical trading volatility, the volatility factor was estimated by management using the historical volatilities of comparable companies in the same industry and region.

(4) Management determined the dividend yield to be 0% based upon its expectation that it will not pay dividends for the foreseeable future.

(5) Management has determined that the probability of a stock offering is 100% in each of the next five years.

(6) Management estimates that the range of percentages of existing shares offered in each stock offering will be between 35% of the shares outstanding.

(7) Represents the estimated offering price range in future offerings as determined by management.

Note 7 – Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities at September 30, 2012 and December 31, 2011 are as follows:

	September 30, 2012	December 31, 2011
Deferred tax assets:		
Net operating losses	$ 14,477,844	$ 13,089,314
Share-based compensation	847,670	741,420
Other differences in tax basis	60,783	4,749
Total deferred tax assets	15,386,297	13,835,483
Less: valuation allowance	(15,286,297)	(13,835,483)
Deferred tax assets, net	$ -	$ -

As of September 30, 2012, for U.S. federal income tax reporting purposes, the Company has approximately $45 million of unused net operating losses ("NOLs") available for carry forward to future years. The benefit from the carry forward of such NOLs will begin expiring during the year ended December 31, 2018. Because United States tax laws limit the time during which NOL carry forwards may be applied against future taxable income, the Company may be unable to take full advantage of its NOL for federal income tax purposes should the Company generate taxable income. Further, the benefit from utilization of NOLs carry forwards could be subject to limitations due to material ownership changes that could occur in the Company as it continues to raise additional capital. Based on such limitations, the Company has significant NOLs for which realization of tax benefits is uncertain.

The difference between the income tax provision and the amount that would result if the U.S. Federal statutory rate of 34% were applied to pre-tax income (loss) for the nine months ended September 30, 2012 and 2011 is as follows:

	For the Nine Months Ended September 30,			
	2012		2011	
Federal income taxes at 34%	$ (1,864,544)	-34.00%	$ (207,014)	-34.00%
Share-based compensation costs	106,250	2.00%	-	-
Change in fair value of derivatives	(97,785)	-1.86%	-	-
Amortization of debt discounts	305,266	5.77%	-	-
Change in valuation allowance	1,550,814	28.09%	207,014	34.00%
Provision for income tax	$ -	-	$ -	-

Note 8 – Commitments and Contingencies

The Company has entered into license and research and development agreements with third parties under which the Company is obligated to make customary payments in the form of upfront payments as well as milestone and royalty payments. Notable inclusions in this category are:

a. Abbott Biotherapeutics Corp – The Company entered into a Product Development and Patent License Agreement with Abbott Biotherapeutics Corp. (formerly Facet Biotech formerly known as Protein Design Labs) in 2003 to secure exclusive rights to a specific antibody when conjugated with alpha emitting radioisotopes. Upon execution of the agreement, the Company made a license fee payment of $3,000,000.

The Company agreed to make milestone payments totaling $7,750,000 for the achievement of the following agreed to and contracted milestones:

Milestones	Payments
(1) when Company initiates a Phase I Clinical Trial of a licensed product	$ 750,000
(2) when Company initiates a Phase II Clinical Trial of a licensed product	750,000
(3) when Company initiates a Phase III Clinical Trial of a licensed product	1,500,000
(4) Biological License Application filing with U.S. FDA	1,750,000
(5) First commercial sale	1,500,000
(6) after the first $10,000,000 in net sales	1,500,000

Under the agreement, the Company shall pay to Abbott Biotherapeutics Corp on a country-by-country basis a royalty of 12% of net sales of all licensed products until the later of: (1) 12.5 years after the first commercial sale, or (2) when the patents expire.

As of September 30, 2012, the Company met its first milestone and upon reaching the milestone the Company paid Abbott Biotherapeutics Corp. a milestone payment of $750,000 on July 24, 2012. The milestone payment for the Phase I Clinical Trial was recorded as research and development expense.

b. MSKCC – In February 2002, the Company entered into a license agreement with MSKCC that requires a technology access fee of $50,000 upon execution, an annual maintenance fee of $50,000 and an annual research funding of $50,000 for as long as the agreement is in force.

Milestones	Payments
(1) filing of an New Drug Application ("NDA") or regulatory approval for each licensed product	$ 750,000
(2) upon the receipt of regulatory approval from the U.S. FDA for each licensed product	1,750,000

Under the agreement, the Company shall pay to MSKCC on a country-by-country basis a royalty of 2% of net sales of all licensed products until the later of: (1) 10 years from the first commercial sale, or (2) when the patents expire.

The Company expects to file the NDA for regulatory approval in 2015.

c. Oak Ridge National Laboratory (ORNL) – API has contracted to purchase radioactive material to be used for research and development through December 2012. API is contracted to purchase $233,100 of radioactive material to be used for research and development, with a renewal option at the contract end. The Company is currently negotiating the 2013 agreement. The terms and projected cost is expected to be consistent with the current 2012 agreement.

d. AptivSolutions provides project management services for the study of the drug Ac-225-HuM195 (Actimab-A) used in the Company clinical trials, Phase I and Phase II. The total project is estimated to cost $1,859,333 and requires a 12.5% down payment of the total estimated project cost. The down payment totaling $239,000 was paid in 2007 and 2012. On August 6, 2012, the agreement was amended to provide for additional services. The total project is now estimated at $1,997,732. AptivSolutions bills the Company when services are rendered and the Company records the related expense to research and development.

e. On June 15, 2012, the Company entered into a license and sponsored research agreement with Fred Hutchinson Cancer Research Center (FHCRC). The Company will build upon previous and ongoing clinical trials, with BC8 (licensed antibody) and eventually develop a clinical trial with Actinium 225. FHCRC has currently completed Phase I and Phase II of the clinical trial and the Company intends to start preparation for a pivotal trial leading to an FDA approval. The Company has been granted exclusive rights to the BC8 antibody and related master cell bank developed by FHCRC. The cost to develop the trial will range from $13.2 million to $23.5 million, depending on the trial design as required by the FDA. Under the terms of the sponsored research agreement, the Company will fund the FHCRC lab with $150,000 per year for the first two years and $250,000 thereafter. Payments made toward funding the lab will be credited toward royalty payments owed to FHCRC in the given year. A milestone payment of $1 million will be due to FHCRC upon FDA approval of the first drug. Upon commercial sale of the drug, royalty payments of 2% of net sales will be due to FHCRC.

f. In 2012, the Company commenced a Company sponsored multi-center Phase I/II clinical trial for Actimab™-A in elderly Acute Myeloid Leukemia. The clinical trial will be conducted under the protocols established by the Company and pursuant to an Investigational New Drug Exemption (IND 10807) held by the Company. The Company has engaged the leading institutions to perform the clinical trial on 60 patients through December 2013.

On March 27, 2012, the Company entered into a clinical trial agreement with Memorial Sloan Kettering Cancer Center. The Company will pay $31,185 for each patient that has completed the clinical trial. Upon execution of the agreement, the Company is required to pay a start-up fee of $79,623. The amount due of $79,623 was paid on July 10, 2012.

On July 19, 2012, the Company entered into a clinical trial agreement with Fred Hutchinson Cancer Research Center. The Company will pay $31,366 for each patient that has completed the clinical trial. Upon execution of the agreement, the Company is required to pay a start-up fee of $19,749. During the clinical trial additional fees apply and will be invoiced when applicable. The amount due has not been invoiced but accrued by the Company as of September 30, 2012.

On August 28, 2012, the Company entered into a clinical trial agreement with The University of Texas M.D. Anderson Cancer Center. The total estimated cost of conducting the clinical trial is $481,204, which includes a non- refundable institutional fee of $14,500. The estimated cost is based on treating 24 patients through 2013. Upon execution of the agreement, the Company is required to make a payment of $33,946. The amount due has not been invoiced but accrued by the Company as of September 30, 2012.

On September 26, 2012, the Company entered into a clinical trial agreement with Johns Hopkins University. The Phase I/II clinical trial will be conducted with Actinium 225. The clinical trial will be conducted under the protocols established by the Company and pursuant to an Investigational New Drug Exemption (IND 10807) held by the Company. The Company will pay $38,501 per patient, who has completed the clinical trial. The Company is required to pay a start-up fee of $22,847, an annual pharmacy fee of $2,025 and an amendment processing fee of $500, when applicable. The amount due has not been invoiced but accrued by the Company as of September 30, 2012.

On August 30, 2012, the Company and Cactus Ventures, Inc. mutually agreed to a letter of intent whereby the Company intends to become a public entity upon the execution of a Share Exchange Agreement with Cactus Ventures, Inc. The Company will pay $250,000 and transfer all shares issued and outstanding to Cactus Ventures, Inc. and Cactus Ventures, Inc. will issue 99% of the issued and outstanding shares of Cactus Ventures, Inc. The Company is required to raise a minimum of $5,000,000 in equity financing at or prior to the closing. The letter of intent terminates October 31, 2012 unless extended to December 31, 2012. On October 18, 2012, the Company exercised its option to extend the letter of intent. Upon execution of the letter of intent, the Company paid a deposit of $25,000 to be held in trust until closing.

On August 7, 2012, the Company entered into a placement agent agreement with Laidlaw & Co. for the 2012 common stock offering The placement agent will assist the Company, under a private placement, in raising equity funds of $5-$15 million. Under the terms of the agreement, the Company paid an activation of fee of $75,000 on August 13, 2012. In addition, the Company will pay a 10% cash fee of gross proceeds raised plus a 2% cash fee for non-allocable expenses. Laidlaw & Co. will receive warrants equal to 10% of securities sold.

On August 1, 2012, the Company entered into a rental agreement for office space at 501 Fifth Avenue, 3rd Floor, New York, NY 10017. The agreement terminates January 31, 2013 unless a Notice of Termination is provided to the landlord 60 days prior to January 1, 2013. The agreement automatically renews on a month-to-month basis and requires a two month notice of termination. The Company paid a two month refundable deposit.

The Company also rents office space at 391 Lafayette Street, Newark, NJ. The agreement is on a month-to-month basis and requires a 45-day notice by either party to cancel.

Note 9 – Equity

During the nine months ended September 30, 2012, the Company raised $759,300 through an offering of the 2011 Series E preferred shares. A net amount after offering costs of $660,163 was received by the Company in 2012.

Placement Agent – In connection with the offering of the 2011 Preferred Series E shares and the Convertible Notes and related warrants, Laidlaw & Co. and the Company entered into a placement agency agreement dated May 9, 2011, as amended July 12, 2011. With money raised in 2012, the Company issued Laidlaw & Co. warrants to purchase an aggregate of 363,646 shares of common stock, with an exercise price of $0.26 per share which expires on January 31, 2019. In addition, the Company paid Laidlaw & Company (UK) Ltd. outside counsel, McCormick & O'Brien PLLC, $8,021 for its services as placement agent's legal counsel.

Management Firm – In connection with the offering of the 2011 Preferred Series E shares and the Convertible Notes and related warrants, AmerAsia Inc. and the Company entered into a transaction management agreement dated May 9, 2011, as amended July 12, 2011. Whereby AmerAsia Inc. will provide consulting services to the Company related to the Company becoming an entity whose securities are publicly traded. Pursuant to this agreement, the Company will pay AmerAsia Inc. $12,500 per month until the public company transaction occurs. Thereafter, the transaction management agreement will continue for a minimum of three months.

In 2011, the Company issued AmerAsia Inc. warrants to purchase an aggregate of 5,930,272 shares of common stock, with an exercise price of $0.01 per share and expires in 2018. In 2012, the Company issued AmerAsia Inc. additional warrants to purchase an aggregate of 400,013 shares of common stock, with an exercise price of $0.01 per share and expire on January 19, 2012. The warrants included a cashless exercise provision.

At September 30, 2012, the Company has the following shares of Preferred Stock authorized and issued:

Preferred Stock	Authorized Shares	Issued Shares
Series A	1,000,000	1,000,000
Series B	4,711,247	4,711,247
Series C-1	800,000	800,000
Series C-2	666,667	666,667
Series C-3	502,604	502,604
Series C-4	4,250,000	4,250,000
Series D	3,000,000	3,000,000
Series E	30,000,000	26,606,306

Note 10 – Stock Option

There were no option activities during the nine months ended September 30, 2011.

In February 2012, the Company re-priced 822,400 units of employee stock options to reflect the current per share fair market value of the Company's common stock. The exercise prices of all of the current outstanding stock options were reduced to $0.26 per share. The Company recorded an incremental compensation cost of $34,879 as a result of the re-pricing of options.

During the nine months ended September 30, 2012, options to purchase 4,390,000 shares of common stock were granted to several employees and consultants at an exercise price of $0.26 per share, and additional options to purchase 700,000 shares of common stock were issued to several employees and consultants at an exercise price of $0.50 per share. These options have a term of 10 years and vest over a 4 year period. The fair value of $1,280,467 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include: (1) discount rate of 1.08% (2) expected life of 7 years, (3) expected volatility of 61.10% ~ 61.30%, and (4) zero expected dividends.

The following is a summary of option activities for the nine months ended September 30, 2012:

	Number of Units	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2011	822,400	$ 0.26	5.51	$ -
Granted	5,090,000	0.29	9.67	
Outstanding, September 30, 2012	5,912,400	$ 0.29	8.99	$ 672,500

All options issued and outstanding are being amortized over their respective vesting periods. The unrecognized compensation expense at September 30, 2012 and December 31, 2011 were $1,203,841 and $12,235, respectively. During the nine months ended September 30, 2012 and September 30, 2011, the Company recorded option expense of $168,000 and $6,802, respectively.

Note 11 – Warrants

There were no warrant activities during the nine months ended September 30, 2011.

During the nine months ended September 30, 2012, warrants to purchase 400,013 shares of common stock were granted to the Management Firm at an exercise price of $0.01 per share. These warrants have a term of 7 years and vest immediately. The fair value of $144,463 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include: (1) discount rate of 1.24%, (2) warrant life of 7 years, (3) expected volatility of 62.31%, and (4) zero expected dividends. These warrants vest immediately.

During the nine months ended September 30, 2012, the Company also issued the following warrants:

Warrants issued to investors with Series E Preferred Stock (See Note 6)	727,292
Placement agent warrants related to issuance of Series E Preferred Stock (See Note 6 and Note 9)	363,646
Total warrants issued	1,090,938

The following is a summary of warrant activities for the nine months ended September 30, 2012:

	Number of Units	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2011	16,109,782	$ 0.17	6.76	$ 3,261,367
Granted	1,490,951	0.19	6.59	
Outstanding, September 30, 2012	17,600,733	$ 0.17	6.28	$ 3,859,397

Note 12 – Subsequent Events

On November 21, 2012, the Company entered into a clinical trial agreement with the University of Pennsylvania. The Phase I/II clinical trial will be conducted with Actinium 225. The clinical trial will be conducted under the protocols established by the Company and pursuant to an Investigational New Drug Exemption (IND 10807) held by the Company. The Company will pay $31,771 per patient, who has completed the clinical trial. The Company will be required to pay a start-up fee of $16,000 and additional administrative fees, when applicable.

On December 28, 2012, the Company and its shareholders entered into a Share Exchange Agreement ("Share Exchange") with Cactus Ventures, Inc. ("Cactus"), pursuant to which Cactus acquired 12,939,986 shares of capital stock of the Company from the Company's shareholders in exchange for the issuance of 4,309,015 shares of Common Stock to the Company's shareholders. As part of the Share Exchange, the Company paid $250,000 to the shareholders of Cactus before the consummation of the Share Exchange. As a result of the Share Exchange, Actinium became Cactus' subsidiary and the Company's shareholders became the principal shareholders of Cactus. The Share Exchange was accounted for as a reverse takeover wherein Actinium is considered the acquirer for accounting and financial reporting purposes.

Exhibit 99.3

Unaudited pro forma combined financial information of Cactus Ventures, Inc. and Actinium Pharmaceuticals, Inc.

The unaudited pro forma information below gives effect to the share exchange between Cactus Ventures, Inc. and Actinium Pharmaceuticals, Inc. as if it had been consummated as of the beginning of the applicable period. The unaudited pro forma information has been derived from the historical Financial Statements of these two companies. The unaudited pro forma information is for illustrative purposes only. You should not rely on the unaudited pro forma financial information as being indicative of the historical results that would have been achieved had the acquisition occurred in the past or the future financial results that the Company will achieve after the merger.

Cactus Ventures, Inc. and Actinium Pharmaceuticals Inc.
Pro Forma Combined Balance Sheets
(Unaudited)

	Cactus Ventures Inc. September 30, 2012	Actinium Pharmaceuticals Inc. September 30, 2012	Pro Forma Adjustments		Pro Forma Combined
Current Assets					
Cash	$ -	$ 2,566,669	$ 4,300,000	(1)	$ 6,866,669
R&D reimbursement receivable	-	187,765	-		187,765
Prepaid expenses and other current assets	-	41,066	-		41,066
Deferred financing costs	-	32,523	-		32,523
Total current assets	-	2,828,023	4,300,000		7,128,023
Property and equipment, net	-	2,616	-		2,616
Total Assets	$ -	$ 2,830,639	$ 4,300,000		$ 7,130,639
Liabilities and Stockholders' Equity (Deficit)					
Current liabilities					
Accounts payable and accrued expenses	$ 31,136	$ 576,624	(31,136)	(3)	$ 576,624
Accounts payable - related party	-	50,000	-		50,000
Convertible notes payable, net	-	802,479	-		802,479
Derivative liabilities	-	5,204,348	-		5,204,348
Total current liabilities	31,136	6,633,451	(31,136)		6,633,451
Notes payable-related parties	72,857	-	(72,857)	(3)	-
Total liabilities	103,993	6,633,451	(103,993)		6,633,451
Shareholders' equity (deficit)					
Preferred stock-series A	-	10,000	(10,000)	(1)	-
Preferred stock-series B	-	47,112	(47,112)	(1)	-
Preferred stock-series C-1	-	8,000	(8,000)	(1)	-
Preferred stock-series C-2	-	6,667	(6,667)	(1)	-
Preferred stock-series C-3	-	5,026	(5,026)	(1)	-
Preferred stock-series C-4	-	42,500	(42,500)	(1)	-
Preferred stock-series D	-	30,000	(30,000)	(1)	-
Preferred stock-series E	-	266,061	(266,061)	(1)	-
Common stock	111,550	24,078	(105,355)	(1)	211,303
			181,030	(2)	
Additional paid- in capital	63,885	48,430,356	(181,030)	(2)	52,958,497
			4,820,721	(1)	
			103,993	(3)	
			(279,428)	(4)	
Accumulated deficit	(279,428)	(52,672,612)	279,428	(4)	(52,672,612)
Total shareholders' equity (deficit)	(103,993)	(3,802,812)	4,403,993		497,188
Total liabilities and shareholders' equity (deficit)	$ -	$ 2,830,639	$ 4,300,000		$ 7,130,639

Pro forma footnotes:

(1) To record estimated minimum net proceeds from the sale of common stock, conversion of notes payable and conversions of preferred stock of Actinium to common stock concurrent with the reverse merger.
(2) To record 100% of Actinium Pharmaceuticals, Inc.'s fully diluted shares in exchange for 99% ofCactus Ventures, Inc. shares.
(3) To eliminate accrued expenses and notes payable of Cactus Ventures, Inc. upon reverse merger. Actinium Pharmaceuticals Inc. is not assuming the related debt.
(4) To eliminate accumulated deficit of Cactus Ventures, Inc.

Cactus Ventures, Inc. and Actinium Pharmaceuticals, Inc.
Pro Forma Combined Statements of Operations
For the Nine Months Ended September 30, 2012
(Unaudited)

	Cactus Ventures, Inc. September 30, 2012	Actinium Pharmaceuticals, Inc. September 30, 2012	Pro Forma Adjustments		Pro Forma Combined
Revenues	$ -	$ -	$ -		$ -
Operating expenses					
Research and development, net	-	2,529,859	-		2,529,859
General and administrative	15,624	1,520,221	-		1,535,845
Depreciation and amortization	-	429	-		429
Total operating expense	15,624	4,050,509	-		4,066,133
Loss from operations	(15,624)	(4,050,509)			(4,066,133)
Other (income) expense:					
Interest expense	4,040	952,241	(4,040)	(2)	952,241
Change in fair value of derivative liabilities	-	287,604	-		287,604
Total other (income) expense	4,040	1,239,845	(4,040)		1,239,845
Net loss	$ (19,664)	$ (5,290,354)	$ 4,040		$ (5,305,978)
Net loss per common share - basic and diluted	$ (0.01)	$ (2.20)			$ (0.25)
Weighted average number of common shares outstanding - basic and diluted	11,155,008	2,407,805	7,567,541	(1)	21,130,354

Pro forma footnotes:

1 To adjust weighted average number of common shares outstanding as if the shares issued under the merger were issued and outstanding at the beginning of the period.

2 To eliminate expense. Actinium Pharmaceuticals Inc. is not assuming the related debt.

Cactus Ventures, Inc. and Actinium Pharmaceuticals, Inc.
Pro Forma Combined Statements of Operations
For the Year Ended December 31, 2011
(Unaudited)

	Cactus Ventures, Inc. December 31, 2011	Actinium Pharmaceuticals, Inc. December 31, 2011	Pro Forma Adjustments		Pro Forma Combined
Revenues	$ -	$ -	$ -		$ -
Operating expenses					
Research and development, net	-	323,788	-		323,788
General and administrative	9,952	2,959,246	-		2,969,198
Depreciation and amortization	-	633	-		633
Total operating expense	9,952	3,283,667	-		3,293,619
Loss from operations	(9,952)	(3,283,667)	-		(3,293,619)
Other (income) expense:					
Interest expense	4,759	175,094	(4,759)	(2)	175,094
Gain on retention of deposit	(25,000)	-			(25,000)
Change in fair value of derivative liabilities	-	(13,966)			(13,966)
Total other (income) expense	(20,241)	161,128	(4,759)		136,128
Net income (loss)	$ 10,289	$ (3,444,795)	4,759		$ (3,429,747)
Net income (loss) per common share - basic and diluted	$ 0.01	$ (1.43)			$ (0.19)
Weighted average number of common shares outstanding - basic and diluted	11,155,008	2,407,805	7,567,541	(1)	21,130,354

(1) To adjust weighted average number of common shares outstanding as if the shares issued under the merger were issued and outstanding at the beginning of the period.
(2) To eliminate expense. Actinium Pharmaceuticals Inc. is not assuming the related debt.