Actinium Pharmaceuticals, Inc.
Form 10-K
February 28, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
x Annual Report Under Section 13 Or 15(d) Of The Securities Exchange Act Of 1934

For the fiscal year ended December 31, 2013

or

o Transition Report Under Section 13 Or 15(d) Of The Securities Exchange Act Of 1934

For the transition period from _____to _____

COMMISSION FILE NUMBER: 000-52446

ACTINIUM PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	88-0378336
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

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

(646) 459-4201
Registrant's telephone number, including area code

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No x

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Date File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of the chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 126-2 of the act): Yes o No x

The aggregate market value of voting stock held by nonaffiliates of the registrant as of June 30, 2013, the last business day of the registrant's most recently completed second fiscal quarter, based on the closing price of the common stock on the OTCQB on June 28, 2013 was $56,555,717.

As of February 26, 2014, 25,324,978 shares of common stock, $0.001 par value per share, were outstanding.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Report") contains forward looking statements that involve risks and uncertainties, principally in the sections entitled "Description of Business," "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations." All statements other than statements of historical fact contained in this prospectus, including statements regarding future events, our future financial performance, business strategy and plans and objectives of management for future operations, are forward-looking statements. We have attempted to identify forward-looking statements by terminology including "anticipates," "believes," "can," "continue," "coul "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "should," or "will" or the negative of these ter comparable terminology. Although we do not make forward looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under "Risk Factors" or elsewhere in this prospectus, which may cause our or our industry's actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time and it is not possible for us to predict all risk factors, nor can we address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements included in this document are based on information available to us on the date hereof, and we assumes no obligation to update any such forward-looking statements.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this prospectus. Before you invest in our securities, you should be aware that the occurrence of the events described in the section entitled "Risk Factors" and elsewhere in this prospectus could negatively affect our business, operating results, financial condition and stock price. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus to conform our statements to actual results or changed expectations.

PART I

Item 1. Business.

Business Overview

We are a biopharmaceutical company focused on the $54 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. The Company 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 (MSKCC), whose indirect subsidiary, Actinium Holdings Ltd., is a significant stockholder of the Company. 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" or "Shell" company as such term is defined under the Securities Act. Upon completing the Share Exchange (as defined below), the Company ceased being considered a "blank check" or "Shell" company and is now a clinical-stage biopharmaceutical company developing certain cancer treatments.

On April 11, 2013, the change of domicile from the State of Nevada to the State of Delaware and the change of Cactus Ventures, Inc.'s name from Cactus Ventures, Inc. to Actinium Pharmaceuticals, Inc. became effective in accordance with Articles of Merger filed with the State of Nevada and a Certificate of Merger filed with the State of Delaware. In connection with the name change we also changed (i) the name of our subsidiary Actinium Pharmaceuticals, Inc. to Actinium Corporation, (ii) our par value to $0.001 per share, and (iii) the number of authorized shares of preferred stock to 10 million shares. Effective April 18, 2013 our new trading symbol became ATNM. On September 25, 2013, we merged with our subsidiary, Actinium Corporation. In December 2013, we increased our authorized shares of common stock to 200 million shares and our authorized shares of preferred stock to 50 million shares.

Acquisition of Actinium

On December 28, 2012, Actinium Pharmaceuticals, Inc. ("Actinium") completed a share exchange with Cactus, whereby Cactus acquired 21% of the issued and outstanding capital stock of Actinium Corporation from the shareholders of Actinium Corporation (the "Actinium Shareholders") in exchange for the issuance of 4,309,015 shares of Common Stock of the Company to the Actinium Shareholders (the "Share Exchange"). As part of the Share Exchange, Actinium Corporation paid $250,000 to the shareholders of Cactus before the consummation of the Share Exchange.

The Share Exchange was treated as a recapitalization effected through a share exchange, with Actinium Corporation as the accounting acquirer and the Company 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 Corporation.

As a result of the Share Exchange, the Company assumed the business and operations of Actinium Corporation. On April 11, 2013, the change of domicile from the State of Nevada to the State of Delaware and the change of Cactus Ventures, Inc.'s name from Cactus Ventures, Inc. to Actinium Pharmaceuticals, Inc. became effective in accordance with Articles of Merger filed with the State of Nevada and a Certificate of Merger filed with the State of Delaware. Effective April 18, 2013, our new trading symbol is ATNM.

As we are a "reporting company" under the Exchange Act of 1934, it is required to file periodic filings with the SEC.

On March 11, 2013, Actinium Corporation continued its Share Exchange with the Company, whereby we acquired an additional 36% of the issued and outstanding capital stock of Actinium Corporation from the Actinium Corporation Shareholders in exchange for the issuance of 7,344,390 shares of Common Stock of the Company to the Actinium Shareholders. On August 22, 2013, Actinium Corporation continued its Share Exchange with the Company, whereby the Company acquired an additional 38.2% of the issued and outstanding capital stock of Actinium Corporation from the Actinium Corporation Shareholders in exchange for the issuance of 8,009,550 shares of Common Stock of the Company to the Actinium Shareholders. On September 25, 2013 in accordance with a Certificate of Ownership Merging Actinium Corporation into the Company, the Company merged into itself Actinium Corporation, and Actinium Corporation ceased to exist. As a result of the merger, Actinium Corporation stock owned by the Company has been cancelled and each share of Actinium Corporation not owned by the Company was exchanged for 0.333 shares of Company common stock.

Corporate History of Actinium

Actinium Corporation was incorporated in 2000 in the state of Delaware. Until the Share Exchange, Actinium Corporation 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 a Phase 1/2 design trial as a preparatory regimen in conjunction with fludarabine and reduced intensity radiation conditioning in patients who are ineligible for standard myeloablative conditioning for hematopoietic stem cell transplantation (HSCT) and the Company expects it to enter a regulatory approval trial in 2014, subject to input and approval from the FDA in regard to drug manufacturing, trial data management plan and

documentation submission. The FDA has previously agreed to the proposed pivotal trial design. The above referenced Phase 1/2 trial was conducted in 68 human subjects at the Fred Hutchinson Cancer Research Center (FHCC) in Seattle, WA. Currently, the Investigational new drug (IND) for this drug is held by the licensor, FHCC. We intend to file its own separate IND for the purpose of conducting a Phase 3 trial in 2014. Actimab™-A is currently in a Phase 1/2 trial in newly diagnosed elderly AML. In addition, using its patented APIT platform and via its collaboration with 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.

Actinium Corporation has one wholly owned subsidiary, MedActinium, Inc., a Delaware corporation, which is party to certain isotope related licenses and contracts on which we rely on.

Upon Actinium Corporation'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 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 the Company and thereby also acquired certain patent licenses relating to APIT previously licensed by the Bermuda Company to the Company.

In 2000, we also began what has become a long term relationship with General Atlantic Investments Limited (GAIL), an entity which provided most of the Company's investment capital since 2000 through 2010, totaling $50.7 million. In 2010, 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 MSKCC. In January 2012, the Company closed on approximately $6.7 in net funding through the sale of our stock and a Senior Convertible Note financing. On December 19, 2012, Actinium completed a private offering of units, consisting of common stock, Series A warrants and Series B warrants. The price per unit was $1.65 for aggregate net proceeds of $4.5 million. The Series A Warrants had a 120 day term from January 28, 2013 and were exercisable for an aggregate of up to 3,118,968 shares of the Company's common stock at an initial per share exercise price of $1.65, subject to adjustment. The Series A Warrants expired on May 28, 2013. The Series B Warrants have a five year term from January 28, 2013 and are exercisable for an aggregate of up to 1,559,484 shares of our common stock at an initial per share exercise price of $2.48, subject to adjustment. In the second quarter of 2013, we issued shares of common stock pursuant to the exercise of A-Warrants originally issued in connection with a private placement that closed in December 2012. The warrants were exercised at $1.65 per share, resulting in gross proceeds of $3.5 million for us.

On September 25, 2013 in accordance with a Certificate of Ownership Merging Actinium Corporation into the Company, we merged with Actinium Corporation, and Actinium Corporation ceased to exist. As a result of the merger, Actinium Corporation stock owned by the Company has been cancelled and each share of Actinium Corporation not owned by the Company was exchanged for 0.333 shares of Company common stock.

Our mailing office is located at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 and our telephone number is (646) 459-4201. Our executive office is located at 546 Fifth Avenue, 14th Floor, New York, NY 10036. Our website address is http://www.actiniumpharmaceuticals.com. Except as set forth below, the information on our website is not part of this Annual Report on Form 10-K.

Summary of Scientific and Business Achievements:

Our key scientific and business achievements to date include:

Iomab-B related:
- In-licensing a Phase 2 clinical stage monoclonal antibody, BC8, with safety and efficacy data in more than 250 patients in need of Hematopoietic Stem Cell Transplantation (HSCT), currently in 7 active Phase 1 and Phase 2 clinical trials;
- Obtaining FDA agreement to the Phase 3 trial design for Iomab-B; and
- Commencing manufacturing development of commercial scale and quality production of Iomab-B.

Actimab-A related:
- Commencing a Company sponsored multi-center Phase 1/2 clinical trial for Actimab™-A in elderly AML;
- Developing and organizing manufacturing of Actinium's lead drug candidate Actimab™-A which was accepted by the FDA for multi-center human use;
- Supporting three physician sponsored clinical trials, including a Phase 1 and a Phase 1/2 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; and
- In-licensing the AML targeting monoclonal antibody known as HuM195 or Lintuzumab.

General operations related:
- Establishing clinical and preclinical development relationships with world-class institutions such as MSKCC, FHCRC and University of Texas MD Anderson Cancer Center (the MD Anderson Cancer Center relationship includes clinical trials 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 the Company access to most of the current world supply of Ac-225; and
- Successfully developing commercial production methods for actinium 225.

Business Strategy

We intend to potentially develop our most advanced clinical stage drug candidates through approval in the case of Iomab™-B and up to and including a Phase 2 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, we may elect to commercialize Iomab™-B on our own or with a partner in the United States and/or outside of the United States to out-license the rights to develop and commercialize the product to a strategic partner. In the case of Actimab™-A, we 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 United States. In parallel, we intend to identify and begin initial human trials with additional actinium-225 drug candidates in other cancer indications. We intend to retain marketing rights for our products in the United States whenever possible and out-license marketing rights to our partners for the rest of the world.

Market Opportunity

We are competing in the marketplace for cancer treatments estimated at over $54 billion in 2011 sales pursuant to an IMS Health report 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 monoclonal antibody 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). The Company 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.

Our 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 HSCT. Iomab™-B offers a 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 NHL. These are all follow-on indications for which Iomab™-B can be developed and it is our intention to explore these opportunities when financing becomes available.

There are currently no FDA 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.

We believe that our biggest market opportunity lies in the applicability of our 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 Food and Drug Administration (FDA) approved to create more efficacious and/or safer drugs ("biobetters").

Clinical Trials

Actimab-A

Actimab-A is our product currently in multicenter Phase 1/2 clinical trial in AML. It consists of the monoclonal antibody Lintuzumab and alpha emitting radioisotope actinium 225 (Ac-225). The indication in the ongoing trial is newly diagnosed AML patients over the age of 60.

Previous clinical trials leading to this trial included:

- Phase 1 clinical trial with Bismab-A, the first generation product consisting of the same monoclonal antibody Lintuzumab and Bi-213 alpha emitter, a daughter of Ac-225;
-

Phase 1/2 clinical trial with Bismab-A, the first generation product consisting of the same monoclonal antibody Lintuzumab and Bi-213 alpha emitter, a daughter of Ac-225; and
- Dose escalating pilot Phase 1 clinical trial with Actimab-A, the current product consisting of the Lintuzumab monoclonal antibody and Ac-225 alpha emitter.

Completed Actimab-A related clinical trials outcomes:
- The Phase 2 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.The Phase 1 Actimab-A trial at MSKCC with a single-dose administration of Actimab™-A showed elimination of leukemia cells from blood in 67% of all evaluable patients who receive a full dose and in 83% of those treated at dose levels above 0.5 microcuries per kilogram (μCi/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 μCi/kg. Maximum tolerated single dose in this trial was established at 3 μCi/kg.

Ongoing Actimab-A trial:

We have commenced our first company sponsored Phase 1/2 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. We are conducting this trial 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.

Bismab®-A trials and the Phase 1 Actimab™-A trial were focused on relapsed, refractory and other difficult to treat acute myeloid leukemia patients. The current multicenter Phase 1/2 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.

Iomab-B

Iomab-B is our product currently in preparation for a pivotal Phase 3 multicenter clinical trial. It consists of the monoclonal antibody BC8 and beta emitting radioisotope iodine 131 (I-131). The indication for that trial is bone marrow conditioning for hematopoietic stem cell transplant in relapsed and refractory AML patients over the age of 55.

Previous Iomab-B clinical trials leading to the Phase 3 trial currently in preparation included:

Diseases	N	Key Findings
AML, MDS, ALL (adult)	34	-7/34 patients with median disease free state (DFS) of 17 years. -18/34 patients in remission at day 80
AML >1st remission (adult)	23	-15/23 in remission at day 28
AML 1st remission (age 16-50)	43	-23/43 DFS from 5-16 years -30/43 in remission at day 28 -33/43 in remission at day 80
High-risk MDS, advanced AML (age 50+)	68 in dose escalation study 31 treated at MTD	-CR (complete remission) in all patients -1 yr survival ~40% for all patients -1 yr survival ~45% for pts treated at MTD (maximum tolerated dose)
High-risk MDS, AML (age 18– 50)	14 in dose escalation	All patients achieved full donor chimerism by day 28 post-transplant
High-risk MDS, AML -haploidentical donors (adult)	8 in dose escalation	-6/8 treated patients achieved CR by day.28 -8/8 patients 100% donor chimerism by day28

Ongoing Iomab-B clinical trials include:

Diseases	Phase
Relapsed and refractory Hodgkin Lymphoma and NHL (adult)	Phase 1
Advanced AML, ALL and MDS (adult)	Phase 2
AML 1st remission (age 16-50)	Phase 2
High-risk MDS, advanced AML (age 16-50)	Phase 2

There are additional ongoing clinical trials with BC8 antibody labeled with yttrium 90 (Y-90).

Phase 3 Iomab-B clinical trial in preparation:

The FDA agreed to the Phase 3 clinical trial design as follows:

- Single pivotal study, pending trial results;
- Patient population: refractory AML patients over the age of 55, where refractory includes primary and secondary refractory and relapsed after <6 months in complete remission;
- Trial arms: study arm and control arm with physician's choice of conventional care with curative intent; and
- Trial size: 150 patients total (75 patients per arm).

Operations

Our 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 1/2 trial, support for an ongoing Phase 1 clinical trial at MSKCC, managing isotope and other materials supply chain, and managing the manufacturing of the finished drug candidate product. We have secured access to much of the currently available world reserves of Ac-225 and Bi-213 through a renewable contractual arrangement with the United States Department of Energy (DOE). We project that these quantities are sufficient to support early stages of commercialization of alpha isotopes based products. The Company 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 Phase 3 pivotal trial (a trial that leads to registration trial marketing approved by the FDA) which will include development of commercial scale manufacturing to be suitable for an approval trial and preparation of appropriate regulatory submissions.

For the years ended December 31, 2013, 2012 and December 31, 2011, we spent approximately $2.7 million, $3.4 million and $0.3 million, respectively, on research and development activities. These expenditures consisted of materials maintenance and purchases, supply chain development and implementation, drug candidate manufacturing expenditures, clinical trials costs and intellectual property portfolio related expenses. Since we have no customers, none of the costs of such research and development activities were borne by our customers.

In the second quarter of 2013, we issued shares of common stock pursuant to the exercise of Series A Warrants originally issued in connection with a private placement that closed in January 2013. The warrants were exercised at $1.65 per share, resulting in gross proceeds of approximately $3.5 million for us. In December 2013 and January 2014, we closed on total gross proceeds of approximately $6.6 million from the private placement of common stock and warrants to new and existing accredited investors. With the money raised in the December 2013 and January 2014 financings, we believe that we have sufficient cash to continue our operations for the balance of 2014 and into the first quarter of 2015.

We estimate that we will need approximately up to $25 million cash for the period of 2014 to 2016, i.e. until we receive our first product approval. We intend to fund these expenses from a combination of equity and/or debt funding raises and payments obtained from licensing partners.

Failure to raise additional equity or debt funding in the amounts necessary to complete our programs and/or failure to out license our programs on the projected terms may result in a slowing down of our projected development plan or our inability to complete one or more of the planned programs.

Summary of Material Agreements Related to Our Business

a. Abbott Biotherapeutics Corp. We 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, we made a license fee payment of $3.0 million.

   We agreed to make milestone payments totaling $7.8 million for the achievement of contracted milestones. These milestones include (i) a payment of $750,000 when Company initiates a Phase 1 Clinical Trial of a licensed product, (ii) a payment of $750,000 when Company initiates a Phase 2 Clinical Trial of a licensed product, (iii) a payment of $1.5 million when Company initiates a Phase 3 Clinical Trial of a licensed product, (iv) a payment of approximately $1.8 million upon the Biological License Application filing with United States FDA, (v) a payment of approximately $1.5 million upon the first commercial sale, and (vi) a payment of approximately $1.5 million after the first $10 million in net sales.

   Under the agreement, we agreed to pay to Abbott Biotherapeutics Corp on a country-by-country basis a royalty of up to 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 December 31, 2013, we met our first milestone and upon reaching the milestone we paid Abbott Biotherapeutics Corp. a milestone payment of approximately $0.8 million on July 24, 2012. We have not initiated a Phase II Clinical Trial and no payment has been made to Abbott Biotherapeutics Corp. during 2013.

b. Memorial Sloan Kettering Cancer Center (MSKCC). In February 2002, we 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.

We agreed to make milestone payments totaling $2.5 million for the achievement of contracted milestones. These milestones include (i) a payment of $750,000 upon the filing of an New Drug Application ("NDA") or regulatory approval for each licensed product and (ii) a payment of $1,750,000 upon the receipt of regulatory approval from the U.S. FDA for each licensed product. All the milestones and payments are related to products based on alpha emitter based products. Currently, the only such product in clinical development is Actinmab-A.

Under the agreement, we agreed to 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. We expect to file the NDA for regulatory approval in 2016.

c. ORNL – For the year ended December 31, 2013, we contracted to purchase radioactive material to be used for research and development of $0.3 million for 2013 For 2014, we entered into a contract to purchase approximately $0.4 million with a renewal option at the contract end.

d. Aptiv Solutions. Aptiv Solutions provides project management services for the study of the drug Ac-225-HuM195 (Actimab™-A) used in our Phase 1 and Phase 2 clinical trials. The total project is estimated to cost approximately $1.9 million and requires a 12.5% down payment of the total estimated project cost. A down payment totaling $239,000 was paid in 2007 and 2012. The agreement was amended to provide for additional services on August 6, 2012, October 22, 2012 and May 16, 2013. The total project is now estimated at approximately $2.2 million.

e. Fred Hutchinson Cancer Research Center (FHCRC). On June 15, 2012, we entered into a license and sponsored research agreement with FHCRC. We 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 we intend to start preparation for a pivotal trial leading to an FDA approval. We have 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, we will fund the FHCRC lab with $150,000 per year for the first two years and approixmatley $0.3 million thereafter. Payments made toward funding the lab will be credited toward royalty payments owed to FHCRC in the given year. A milestone payment of $1.0 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. MSKCC. On March 27, 2012, we 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 paid a start-up fee of $79,623 on July 10, 2012.

g. FHCRC. On July 19, 2012, we entered into a clinical trial agreement with FHCRC. We will pay $31,366 for each patient that has completed the clinical trial. Upon execution of the agreement, we are required to pay a start-up fee of $19,749.

h. The University of Texas M.D. Anderson Cancer Center. On August 28, 2012, we 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 approximately $0.5 million, 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, we paid $33,946.

i. Johns Hopkins University. On September 26, 2012, we entered into a clinical trial agreement with Johns Hopkins University. The Phase 1/2 clinical trial will be conducted with Actinium 225. The clinical trial will be conducted under the protocols established by us and pursuant to an Investigational New Drug Exemption (IND 10807) held by us. We will pay $38,501 per patient, who has completed the clinical trial. We are 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.

j. University of Pennsylvania. On November 21, 2012, we entered into a clinical trial agreement with the University of Pennsylvania. The Phase 1/2 clinical trial will be conducted with Actinium 225. The clinical trial will be conducted under the protocols established by us and pursuant to an Investigational New Drug Exemption (IND 10807) held by us. We will pay $31,771 per patient, who has completed the clinical trial. We will be required to pay a start-up fee of $16,000 and additional administrative fees, when applicable.

k. Goodwin Biotechnology Inc. (Goodwin). On January 27, 2014, we entered into a manufacturing agreement with Goodwin. Goodwin will oversee the current Good Manufacturing Practices (cGMP) production of a monoclonal antibody anticipated to be used in an upcoming phase 3 clinical trial of Iomab™-B. Total cost of the agreement is approximately $2.8 million. We made a non-refundable payment of approximately $0.6 million upon execution of the agreement. Periodic payments will be made upon reaching certain milestones.

Intellectual Property Portfolio

We have a patent portfolio with 8 issued patents and 60 pending patents in various jurisdictions as follows: United States: 17 and international: 51. Most of the patents are in-licensed from third parties and some are held by us. These patents cover key areas of our activity, including use of the actinium 225 and other alpha emitting isotopes attached (labeled) to cancer specific carriers like monoclonal antibodies, methods for manufacturing key components of our drug candidates including actinium 225 alpha emitting radioisotope and carrier antibodies, methods for manufacturing finished drug candidates for use in cancer treatment, and methods for mitigating potential toxicities of our drug candidates. These patents are classified in families of related patents per the table below:

Area	Claims	Expiration	Status	Licensor
Platform technology	Metastases larger than 1 mm	2020	Allowed	MSKCC
Platform technology	Use of the DOTA chelator for drug manufacturing	2021	Issued	MSKCC
Drug preparation methods	Actinium 225 labeling method	2029	Pending	Owned
Drug preparation methods	Bismuth 213 labeling method	2017/2020	Issued	MSKCC
Isotope production methods	Actinium 225 manufacturing in a cyclotron	2023/2025	Pending/Allowed	Owned
Monoclonal antibody composition and production	Manufacturing of leukemia targeting antibody	2015	Issued	Abbott Laboratories
Methods of treatment	Protection from actinium 225 toxicity	2023	Pending	MSKCC

Key Strengths

We believe that the key elements for our market success include:

Clinical results to date imply lower development risk for its lead drug candidates: Our 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 1 and Phase 2 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 to date 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 1/2 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 Actimab™-A plus low dose chemotherapy vs. a single dose of Actimab™-A in the physician sponsored trial).

Additional product opportunities from the APIT platform: Our APIT technology has the potential for broad applicability for the treatment of many cancer types, which allows us to add new product candidates to its pipeline based on well-defined patent protected methods.

Collaboration with MSKCC: Our collaboration with MSKCC includes licensing, research and clinical trial arrangements involving MSKCC labs and clinicians and included financial support with respect to certain pre-2012 R&D-related expenses.

Scientific backing of leading experts: Our clinical advisory board and collaborators include some of the most recognized clinicians and scientists working at some of the highest regarded medical institutions in the Uunited States and the world, including MSKCC, Johns Hopkins University, University of Pennsylvania, FHCC and MD Anderson Cancer Center. This is expected to be beneficial to us both in clinical development and market acceptance assuming its drug candidates are approved.

Isotope supply secured for clinical trials: We have a contractual relationship with ORNL of the DOE that provides us 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 technology fully developed: We have developed our 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: We have developed at a contractor's site full cGMP (current good manufacturing practices) manufacturing processes for our drug candidate Actimab™-A.

Substantial IP portfolio: We have an intellectual property portfolio in excess of 60 patents and patent applications, both in the United States and other countries, which cover clinical applications of the APIT technology and methods of manufacturing actinium 225 thus giving us control over both the applications of our technology and a supply chain of our key ingredients, actinium 225 and bismuth 213 alpha emitting isotopes.

Competition Overview

To our 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, we face 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 our lead indication, acute myeloid leukemia, there are a number of companies developing drugs for AML. These drugs are most often small molecules and as such have different safety profiles and mechanisms of action compared to our drug candidates. Acute myeloid leukemia in older patients remains an area of high medical need that could accommodate many new products with favorable safety and efficiency profiles.

In the field of hematopoietic stem cell transplantation, pharmaceuticals currently used for bone marrow ablation/conditioning are generic drugs and to our 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 us. In the United States, the 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 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 February 26, 2014, we have 6 full-time employees. 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.

ITEM 1A. 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 December 31, 2013, we had a deficit accumulated during development stage of approximately $66.5 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 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 2017 and we do not expect that the partnering revenues it will generate will be sufficient to fund our ongoing operations. Our cash balance as of December 31, 2013 was $5.5 million. In December 2013 and January 2014, we received total gross proceeds of approximately $6.6 million from the private placement of common stock and warrants to new and existing accredited investors. We expect that we will need approximately $7.0 million over the next 12 months to finance research and development and to cover our ongoing working capital needs.

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.

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 Company 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 BLA filed with the FDA 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 us 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.

We currently have only two products in clinical development. There is an ongoing physician sponsored Phase 1 AML trial at MSKCC with a single dose of Actimab™-A. We have also commenced a Phase 1/2 multi-center AML trial with fractionated doses of Actimab™-A under its own federal Investigational New Drug Application (IND). Additionally, there are a number of physician IND trials that have been conducted or are currently ongoing at FHCRC with single doses of Iomab™-B. Neither we nor any relevant collaborative partner(s) has yet undertaken any clinical assessment or investigation of Company 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 federal NDA approvals.

The NDA application is the vehicle through which the company may formally propose that the FDA approve a new pharmaceutical for sale and marketing in the United States Once a particular 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 NDA 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 1/2 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 MSKCC. 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. In June 2012, we acquired rights to Iomab™, a Phase 2 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 1/2 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.

The issued patents, which are licensed by us 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 expired 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, we expect 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 our 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 us is 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, we have developed what we believe 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. We are 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, we do 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. Our contract for supply of this isotope from ORNL extends through the end of 2014, is renewable for future years. However, there can be no assurance that ORNL will decide to renew the contract or that the United States Department of Energy will not change its policies that allow for the sale of isotope to the Company. 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.

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 five IRBs. Our 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 1 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 pharmacovigilance 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 2 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 Algeta ASA, Bayer Schering Pharma AG, GlaxoSmithKline Plc and Spectrum Pharmaceuticals, Inc. and others.

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.

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. 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.

We do not yet know what the consequences of the Patient Protection and Affordable Care Act may be on our business.

In March 2010, President Obama signed the Patient Protection and Affordable Care Act (“PPACA”), which makes changes that are expected to significantly impact the pharmaceutical industries. One of the principal aims of the PPACA as currently enacted is to expand health insurance coverage to approximately 32 million Americans who are currently uninsured. The consequences of this significant coverage expansion on the sales of our products, once they are developed, are unknown and speculative at this point.

The PPACA contains a number of provisions designed to generate the revenues necessary to fund the coverage expansions among other things. This includes new fees or taxes on certain health-related industries.

The PPACA provisions on comparative clinical effectiveness research extend the initiatives of the American Recovery and Reinvestment Act of 2009, also known as the stimulus package, which included $1.1 billion in funding to study the comparative effectiveness of health care treatments and strategies. This stimulus funding was designated for, among other things, conducting, supporting or synthesizing research that compares and evaluates the risks and benefits, clinical outcomes, effectiveness and appropriateness of products. The PPACA appropriates additional funding to comparative clinical effectiveness research. Although Congress has indicated that this funding is intended to improve the quality of health care, it remains unclear how the research will impact current Medicare coverage and reimbursement or how new information will influence other third-party payor policies.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. Most recently, on August 2, 2011, the President Obama signed into law the Budget Control Act of 2011, which, among other things, creates the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, which threatened to trigger the legislation's automatic reduction to several government programs, including aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. Congress passed and President Obama signed, however, the American Taxpayer Relief Act of 2012 which delays these required cuts for one year. We expect that the PPACA, as well as other federal or state health care reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and our ability to successfully commercialize our products or could limit or eliminate our spending on certain development projects. The taxes imposed by the PPACA and the expansion in the government's role in the U.S. healthcare industry may result in decreased profits to us, lower reimbursement by payors for our products, and/or reduced medical procedure volumes, all of which may adversely affect our business, financial condition and results of operations.

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

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 became 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.

Because we were formerly an SEC-reporting shell company, we are subject to SEC rules on seasoning requirements.

The Company, since it was formerly an SEC-reporting shell company, is also subject to SEC rules which require such companies to trade in the over-the-counter markets (or some other national exchanges) for one full fiscal year and to file all periodic reports with the SEC before seeking to "up-list" to a national securities exchange like NASDAQ or NYSE MKT. The Company can only bypass the one year over-the-counter trading requirement if it can complete a firm commitment underwritten public offering with gross proceeds of at least $40 million. As a result, our stockholders may find it more difficult to dispose of shares or obtain accurate quotations as to the market value of our common stock.

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.

We believe we need up to $25 million in cash to finance research and development and to cover our ongoing working capital needs through 2016, and we have not completed efforts to establish a stable recurring source of revenues sufficient to cover our operating costs for the next twelve months, We have financed our operations primarily through sales of stock and the issuance of convertible promissory notes. It is likely that during the next twelve months we will seek to raise capital through the sales of stock and/or issuance of convertible promissory notes in order to expand our

level of operations to continue our research and development efforts.

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.

The filing of our Registration Statement on Form S-1 on March 15, 2013 could have potentially affected our exemption from registration with the SEC for the share exchange that commenced on December 28, 2012, in connection with our exchange of common stock with the shareholders of Actinium Corporation (fka, Actinium Pharmaceuticals, Inc.).

On December 28, 2012, we completed a share exchange, that was approved by 78% of our shareholders (100% of those voting approved the share exchange), with Cactus Ventures, Inc. ("Cactus"), whereby Cactus acquired 21% of the issued and outstanding capital stock of Actinium Corporation from the shareholders of Actinium Corporation (the "Actinium Shareholders") in exchange for the issuance of 4,309,015 shares of Common Stock of the Company to the Actinium Shareholders (the "Share Exchange"). We continued the physical process of exchanging shares with the Actinium Shareholders with closings on March 11, 2013 (with a total of 55.5% shares of Actinium Corporation exchanged) and August 22, 2013 (with a total of 93.7% shares of Actinium Corporation exchanged). On September 25, 2013, all of the remaining Actinium Shareholders shares were exchanged for our common stock pursuant to a merger under Delaware law whereby we merged into our self - Actinium Corporation (our subsidiary that was 93.7% owned by us). Under Section 5 of the Securities Act of 1933, unless there is a valid exemption from registration of the securities sold in an offering. All issuers must register non-exempt securities with the SEC. The securities in the Share Exchange 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. On March 15, 2013, we filed a Registration Statement on Form S-1 (the "Registration Statement") with SEC to register shares of certain selling shareholders who had purchased shares of the Company in various private placements (the "2013 offering"). On November 8, 2013, the Registration Statement on Form S-1 was deemed effective by the SEC.

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. We believe we need up to $25 million in cash to finance research and development and to cover our ongoing working capital needs through 2016, and we have not completed efforts to establish a stable recurring source of revenues sufficient to cover our operating costs for the next twelve months, We have financed our operations primarily through sales of stock and the issuance of convertible promissory notes. It is likely that during the next twelve months we will to continue to finance our operations through sales of stock and/or issuance of convertible promissory notes.

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

Our common stock is quoted on the OTCQB, which is a significantly more limited trading market than the NYSE MKT or The NASDAQ Stock Market. The quotation of our shares on the OTCQB 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 OTCQB which may result in stock price volatility and inaccurate quote information.

When fewer shares of a security are being traded on the OTCQB, 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, our common stock is quoted in the OTCQB 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 OTCQB stocks and certain major brokerage firms restrict their brokers from recommending OTCQB stocks because they are considered speculative, volatile and thinly traded. The OTCQB 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 our 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.

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

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 our common stock on the OTCQB 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.

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 OTCQB 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 may 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 (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 our 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 Certificate of Incorporation and Bylaws and Delaware 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 Certificate of Incorporation and Bylaws and certain provisions of Delaware 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, we are governed by Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years, did own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in our control.

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

We are 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

The Company does not own any property. The Company has office space at 546 Fifth Avenue, 14th Floor, New York, NY 10017. The rent is approximately $7,000 per month.

ITEM 3. 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.

ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDERS MATTERS, AND ISSUER PURCHASE OF EQUITY SECURITIES.

Market Information

Our Common Stock is listed on OTCQB, under the symbol "ATNM". Our Common Stock ceased trading on the OTCBB on May 29, 2013. The last quoted price for our Common Stock was $5.39 for a trade on February 27, 2014, as reported on www.otcbb.com.

The following table shows, for the periods indicated, the high and low bid prices per share of our common stock as reported by the OTCQB quotation service. These bid prices represent prices quoted by broker-dealers on the OTCQB quotation service. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commissions, and may not represent actual transactions.

2013		
Quarter ended March 31, 2012	$7.50	$1.50
Quarter ended June 30, 2012	$6.00	$3.10
Quarter ended September 30, 2012	$6.40	$3.37
Quarter ended December 31, 2012	$7.40	$4.70
2012		
Quarter ended March 31, 2012	$-	$-
Quarter ended June 30, 2012	$-	$-
Quarter ended September 30, 2012	$-	$-
Quarter ended December 31, 2012	$-	$-

Holders

As of February 26, 2014 there were 24,903,150 shares of common stock issued and outstanding, which were held by 349 holders of record. There are no shares of preferred stock outstanding. On February 25, 2014, the closing price of our common stock as reported on the OTCQB as $5.59 per share.

Of the 24,903,150 shares of common stock issued and outstanding, 7,234,711 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, until the provisions of Rule 144 are complied with, 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

Certain shareholders are entitled to certain registration rights, including piggy-back registration rights, with respect to the shares of common stock purchased in the offerings conducted by us in 2013 and 2014.

The following shares are subject to registration rights:

1,106,120 shares of common stock, par value $0.001 per share, held by the selling stockholders issued pursuant to the private placement that closed on December 27, 2013 and January 10, 2014;

276,529 shares of our common stock issuable upon exercise of common stock warrants held by the selling stockholders at an exercise price of $9.00 per share issued pursuant to private placements that closed on December 27, 2013 and January 10, 2014; and
138,265 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $9.00 per share issued pursuant to private placements that closed on December 27, 2013 and January 10, 2014.

In addition:

Certain Investors have registration rights pursuant to the following agreement:

Second Amended and Restated Investor Rights Agreement, dated as of October 5, 2011 (the “Agreement”), by and among Actinium Pharmaceuticals, Inc., a Delaware corporation, Actinium Holdings Limited (formerly named General Atlantic Investments Limited”), a Bermuda corporation, and the persons identified as parties in the Agreement (collectively, the “Holders”).

Pursuant to the terms of the Agreement the Holders have the following registration rights:

(1) Piggyback Rights. If at any time or from time to time, the Company shall determine to register any of its equity securities for its own account in a direct public offering or an underwritten public offering, the Company will: (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, all the Registrable Securities (as defined in the Agreement) specified in a written request or requests made within thirty (30) days after receipt of such written notice from the Company by any Holder.

(2) Demand Registration - If at any time after the earlier of (i) the third anniversary of the October 5, 2011, or (ii) three (3) months after the Company’s Common Stock becomes publicly traded (whether through a Qualified Initial Public Offering, a Pubco Transaction (each as defined in the Agreement) or otherwise, (the “Start Date”)) , whichever is earlier, Holders of at least thirty-five percent (35%) of the Registrable Securities (as defined in the Agreement) then outstanding request in writing that the Company file a registration statement under the Securities Act covering the registration of at least 20% of the then outstanding Registrable Securities (as defined in the Agreement), or a lesser percentage if the anticipated aggregate offering price, net of underwriting discounts and commissions, would exceed $10,000,000.

Dividends

We have never declared or paid a cash dividend. Any future decisions regarding dividends are 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

During the fiscal year 2013 our common stock has been a penny stock, therefore, when our stock is considered a penny stock trading in our securities may be subject to penny stock considerations. Broker-dealer practices in connection with transactions in “penny stocks” are regulated by certain penny stock rules adopted by the SEC.

Penny stocks generally are equity securities with a price of less than $5.00 (other than securities registered on certain national securities exchanges or quoted on the NASDAQ system). Penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer’s account. The broker-dealer must also make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser’s written agreement to the transaction. These requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security that becomes subject to the penny stock rules. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit their market price and liquidity of our securities. These requirements may restrict the ability of broker-dealers to sell our common stock and may affect your ability to resell our common stock.

Securities Authorized for Issuance under Equity Compensation Plans

In December 2013, our shareholders approved the Company’s 2013 Stock Plan. The expiration date of the plan is September 9, 2023 and the total number of underlying shares of the Company’s common stock available for grant to employees, directors and consultants of the Company under the plan is 5,750,000 shares.

In December 2013, our shareholders approved the Company’s 2013 Equity Incentive Plan. The expiration date of the plan is September 9, 2023 and the total number of shares of our common stock available for grant to employees, directors and consultants of us under the plan is 1,000,000 shares.

ITEM 6. SELECTED FINANCIAL DATA.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information under this item.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION.

The information and financial data discussed below is derived from the audited consolidated financial statements of Actinium Pharmaceuticals, Inc. for its fiscal years ended December 31, 2013 and 2012. The consolidated financial statements of Actinium Pharmaceuticals, Inc. 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 Pharmaceuticals, Inc. contained elsewhere in this Report. The financial statements contained elsewhere in this Report fully represent Actinium Pharmaceuticals, Inc.'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.

Overview

We were incorporated under the laws of the State of Nevada on October 6, 1997. We were a shell entity that was in the market for a merger with an appropriate operating company.

On December 28, 2012, we entered into a transaction (the "Share Exchange"), pursuant to which the Company acquired 21% of the issued and outstanding equity securities of Actinium Pharmaceuticals, Inc. ("Actinium"), in exchange for the issuance of 4,309,015 shares of common stock, par value $0.001 per share, of the Company (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 the Company. 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. As a result of the Share Exchange, the Company assumed the business and operations of Actinium.

On March 11, 2013, Actinium Corporation continued its Share Exchange with us, whereby we acquired an additional 36% of the issued and outstanding capital stock of Actinium Corporation from the Actinium Corporation Shareholders in exchange for the issuance of 7,344,390 shares of Common Stock of us to the Actinium Shareholders.

On April 11, 2013, the change of domicile from the State of Nevada to the State of Delaware and the change of Cactus Ventures, Inc.'s name from Cactus Ventures, Inc. to Actinium Pharmaceuticals, Inc. became effective in accordance with Articles of Merger filed with the State of Nevada and a Certificate of Merger filed with the State of Delaware. In connection with the name change we also changed (i) the name of our subsidiary Actinium Pharmaceuticals, Inc. to Actinium Corporation, (ii) our par value to $0.001 per share, and (iii) the number of authorized shares of preferred stock to 10 million shares. Effective April 18, 2013 our new trading symbol became ATNM. On September 25, 2013, we merged with our subsidiary, Actinium Corporation, and we were the surviving entity of the merger. In January 2014 we increased our authorized shares of common stock to 200 million shares and authorized shares of preferred stock to 50 million shares.

On August 22, 2013, Actinium Corporation continued its Share Exchange with us, whereby we acquired an additional 38.2% of the issued and outstanding capital stock of Actinium Corporation from the Actinium Corporation Shareholders in exchange for the issuance of 8,009,550 shares of Common Stock of us to the Actinium Shareholders. On September 25, 2013 in accordance with a Certificate of Ownership Merging Actinium Corporation into us, we merged with Actinium Corporation, and Actinium Corporation ceased to exist. As a result of the merger, Actinium Corporation stock owned by us has been cancelled and each share of Actinium Corporation not owned by us was exchanged for 0.333 shares of our common stock.

Actinium, 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. Actinium, together with its wholly owned subsidiary, MedActinium, Inc. (MAI), (hereinafter referred to collectively as “Actinium”) has initiated collaborative efforts with large institutions to establish the proof of concept of alpha particle immunotherapy and has supported one Phase 1/2 clinical trial and one Phase 1 clinical trial at MSKCC under an MSKCC Physician IND Application. In 2012, Actinium launched a multi-center corporate sponsored trial in acute myeloid leukemia (AML) patients. Actinium’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 Actinium’s compounds have been with patients having acute myeloid leukemia and it is believed that Actinium’s APIT platform will have wider applicability for different types of cancer where suitable monoclonal antibodies can be found.

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 United States 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 specifically target 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 FHCRC. 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 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 1/2 trial will be approximately $7 million. Assuming a successful trial we intend to explore out-licensing the Actimab™-A product and potentially receiving payments for co-developing the product with a partner. 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 1 and Phase 2 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 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 2016 will be approximately US $15 million, and up to approximately $25 million for both trials.

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 us has been conducted at Memorial Sloan-Kettering Cancer Center in New York. We have 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 United States., including IsoTex Diagnostics, Oak Ridge National Laboratory, Pacific GMP, Fischer Bioservices, BioReliance and others.

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, 2013, we had an accumulated deficit of approximately $66.5 million. We incurred net losses of approximately $10.8 million and $8.4 million in the years ended December 31, 2013 and 2012, 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 2 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 2 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 MSKCC 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.

Since our inception on June 13, 2000, we have not generated any revenues, and as of December 31, 2013, we have incurred net losses of $66.5 million. As of December 31, 2013 our cash balance was $5.5 million. In December 2013 and January 2014, we raised total gross proceeds of approximately $6.6 million from the private placement of common stock and warrants to new and existing accredited investors. We need approximately $25 million in cash to finance research and development and to cover our ongoing working capital needs through 2016. If we do not raise any additional funding, we will be able to continue our operations through the first quarter of 2015. As we have raised 25% of the needed funds, we will be able to conduct our planned operations into the first quarter of 2015. If we raise 50% of the needed funds, we will be able to conduct our planned development programs through the second half of 2015. If we raise 75% or more of the needed funds, we will be able to accelerate our planned development programs through 2015 and into the second quarter of 2016. Our first product is not expected to be commercialized until at least 2017. In the second quarter of 2013 we issued shares of common stock pursuant to the exercise of Series A Warrants originally issued in connection with a private placement that closed in January 2013. The warrants were exercised at $1.65 per share, resulting in gross proceeds of approximately $3.5 million for us. We believe that we have enough cash on hand to fund our business through the first quarter of 2015. In order to fund our business beyond the first quarter of 2015 we will likely need to raise money through private offerings of debt and/or equity.

Results of Operations

Year Ended December 31, 2013 Compared to Year Ended December 31, 2012

	For the Years ended December 31,		Increase
	2013	2012	(Decrease)
Revenue	$-	$-	$-
Operating expenses:			
Research and development, net of reimbursements	2,666,859	3,440,485	(773,626)
General and administrative	3,919,351	4,506,232	(586,881)
Depreciation and amortization expense	1,560	581	979
Loss on disposition of equipment	4,122	-	4,122
Total operating expenses	6,591,892	7,947,298	(1,355,406)
Loss from operations	(6,591,892)	(7,947,298)	1,355,406
Other income (expense):			
Interest expense	(2,508)	(1,099,327)	1,096,819
Gain on extinguishment of liability	-	-	-
Change in fair value - derivative liabilities	(4,179,392)	685,420	(4,864,812)
Total other income and expense	(4,181,900)	(413,907)	(3,767,993)
Net loss	$(10,773,792)	$(8,361,205)	(2,412,587)

Revenues

We recorded no commercial revenues for the years ended December 31, 2013 and 2012.

Research and Development Expense

Research and development expenses decreased by $0.7 million from approximately $3.4 million for the year ended December 31, 2012 to approximately $2.7 million for the year ended December 31, 2013. The decrease is primarily attributable to the Company conserving capital during the year ended December 31, 2013.

General and Administrative Expenses

Overall, total general and administrative expenses decreased by approximately $0.6 million from approximately $4.5 million for the year ended December 31, 2012 to approximately $3.9 million for the year ended December 31, 2013. The decrease was largely attributable to a decrease in stock-based compensation during the year ended December 31, 2013 as compared to the year ended December 31, 2012.

Other Expense

Other expenses increased by approximately $3.8 million to $4.2 million for the year ended December 31, 2013 compared to $0.4 million for the year ended December 31, 2012. The increase is primarily attributable to a significant loss of approximately $4.2 million on the change in fair value of the derivative liability associated with the December 2012 financing which was offset by a decrease in interest expense related to the amortization of the convertible debt discount and deferred financing costs related to the convertible debt of approximately $1.1 million as a result of us completing the merger with Cactus in December 2012.

Net Loss

Net loss increased by approximately $2.4 million to approximately $10.8 million for the year ended December 31, 2013 compared to approximately $8.4 million for the year ended December 31, 2012. The increase was primarily due to the loss on the change in fair value of the derivative liability offset by an decrease in interest expense associated with the amortization of debt discount to interest expense and a significant decrease in research and development professional fees and payroll related expense.

Liquidity and Capital Resources

We have financed our operations primarily through sales of the Company’s stock and the issuance of convertible promissory notes.

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

	For the year ended December 31,	
	2013	2012
Cash used in operating activities	$ (6,292,416)	$ (5,212,710)
Cash used in investing activities	(16,592)	(2,359)
Cash provided by financing activities	6,223,705	5,129,940
Net change in cash	$ (85,303)	$ (85,129)

Net cash used in operating activities was approximately $6.3 million for the year ended December 31, 2013 compared to approximately $5.2 million used in operations for the same period in 2012. 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.

Net cash provided by financing activities was approximately $6.2 million for the year ended December 31, 2013 compared to net cash provided by financing activities of approximately $5.1 million for the same period in 2012. During the year ended December 31, 2013, the Company received net proceeds from the exercise of warrants and issued stock and warrants for cash as further discussed below. During the year ended December 31, 2012, we received net proceeds of approximately $5.1 million from sales of our common stock.

We have experienced cumulative losses of approximately $66.5 million from inception (June 13, 2000) through December 31, 2013, and have a stockholders' deficit of approximately $1.6 million at December 31, 2013. We estimate that we will need approximately $25 million cash for the period of 2014 to 2016, i.e. until we receive our first product approval. We intend to fund these expenses from a combination of equity and/or debt funding raises and

payments obtained from licensing partners.

Recent Debt and Equity Offerings

In the second quarter of 2013, we issued shares of common stock pursuant to the exercise of A-Warrants originally issued in connection with a private placement that closed in January 2013. The warrants were exercised at $1.65 per share, resulting in gross proceeds of approximately $3.5 million for us. In December 2013 and January 2014, the Company received total gross proceeds of approximately $6.6 million from the private placement of common stock and warrants to new and existing accredited investors. The proceeds from these exercised warrants and the offering will be used for the Company's clinical and preclinical programs and for general working capital. This capital will allow us to continue to develop our drug candidates for treatment of the most difficult forms of cancer, including AML, where we made significant advances and already helped a number of patients. The Company intends to advance its programs and add new programs by the end of 2014. Shareholders exercised 2,095,204 (67.2%) of the 3,118,988 originally issued A-warrants. The A-warrants expired on May 28, 2013. With exercise of the A-warrants and proceeds from the December 2013 Offering we believe that we have the needed capital through the first quarter of 2015. We do not expect proceeds from the exercise of the outstanding B- warrants, Stock Offering warrants, consulting firm warrants, and placement agent warrants since these warrants contain cash-less exercise provisions. To meet our capital needs beyond the first quarter 2015 we intend to conduct offerings of either stock and/or debt and also engage in licensing activities. We are currently sponsoring conduct of two clinical trials with Actimab-A (Phase I Physician trial at MSKCC and Phase 1/2 multicenter trial) and preparing for a Phase 3 trial with Iomab-B. If we do not raise any additional funding, we will be able to continue our operations through the first quarter of 2015. As we have raised 25% of the needed funds, we will be able to conduct our planned operations through 2014 and into the first quarter of 2015. If we raise 50% of the needed funds, we will be able to conduct our planned development programs through the second half of 2015. If we raise 75% or more of the needed funds, we will be able to accelerate our planned development programs through 2015 and into the second quarter of 2016. There can be no assurance that we will be successful in obtaining additional capital through offerings of our securities in the future. Our first product is not expected to be commercialized until at least 2017.

In December 2013 and January 2014, we raised approximately $6.6 million through an offering of 1,106,120 shares of its common stock and five year common stock warrants to purchase 276,529 shares of our common stock, exercisable at a price of $9.00 per share. A net amount of approximately $5.8 million was received by us. Pursuant to the 2013 Common Stock Offering agreement, we paid Laidlaw & Co. total cash fees of approximately $0.8 million, which consisted of placement agent commissions of approximately $0.7 million and expense reimbursements of $0.1 million. We also issued the placement agent warrants to purchase an aggregate of 138,265 shares of the Company's common stock, with an exercise price of $9.00 per share and a term of 5 years. In addition, we paid Laidlaw & Co.'s outside counsel, Sichenzia Ross Friedman Ference LLP, $50,000 for their services as Laidlaw & Co.'s legal counsel and Signature Bank $3,500 for the bank escrow fee.

During 2012, we raised approximately $0.8 million by selling 968,759 shares and warrants to purchase 242,190 shares of our common stock under the Company's Stock Offering. A net amount of approximately $0.7 million was received by us in 2012. We paid Laidlaw & Co. total cash fees of $91,116, which consisted of placement agent commissions of $75,930 and expense reimbursements of $15,186. In addition, we paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $8,020 for their services as the placement agent's legal counsel.

In 2012, we raised approximately $5.2 million through an offering of 3,118,988 shares of its common stock and "A Warrants" to purchase 3,118,988 shares of the Company's common stock, exercisable at a price of $1.65 per share for a period of 120 days from the day of the final closing of the offering, and "B Warrants" to purchase 1,559,505 shares of our common stock, exercisable at a price of $2.48 per share for a period of 5 years from the date of the final closing of the offering. ("2012 Common Stock Offering") A net amount of approximately $4.5 million was received by the Company. Pursuant to the 2012 Common Stock Offering agreement, we paid Laidlaw & Co. total cash fees of approximately $0.6 million, which consisted of placement agent commissions of approximately $0.5 million and expense reimbursements of approximately $0.1 million. We also issued the placement agent warrants to purchase an aggregate of 467,845 shares of our common stock, with an exercise price of $0.78 per share and a term of 5 years. These placement agent warrants were valued at $499,707 and recorded as derivative liabilities. In addition, we paid Laidlaw & Co.'s outside counsel, Richardson & Patel, LLP, $60,000 for its services as Laidlaw & Co.'s legal counsel and Signature Bank $3,500 for the bank escrow fee.

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 2014 we expect cash needs of up to $7.0 million to finance research and development, which include material supply, manufacturing, clinical trials and pre-clinical trials and to cover our ongoing working capital needs.

In the event we do not meet our cash needs of $25.0 million through 2016, it may be necessary for us to delay the timing of various product development efforts.

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.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development reimbursements and grants are recorded by the Company as a reduction of research and development costs.

Share-Based Payments

We estimate 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, we reduce 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

There were various accounting standards and interpretations issued during 2013 and 2012, none of which are expected to have a material impact on the Company’s financial position, operations or cash flows.

Subsequent Event

On February 28, 2014 Sergio Traversa resigned as our Interim Chief Financial Officer and on February 28, 2014 we appointed our President and Chief Executive officer, Kaushik J. Dave, as Interim Chief Financial Officer.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information under this item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Actinium Pharmaceuticals, Inc.
(Formerly Cactus Ventures, Inc.)
(A Development Stage Company)
New York, NY

We have audited the accompanying consolidated balance sheets of Actinium Pharmaceuticals, Inc. (Formerly Cactus Ventures, Inc.) (A Development Stage Company) (the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for each of the years then ended and for the period from June 13, 2000 (Inception) to December 31, 2013. Actinium Pharmaceuticals, Inc.'s management is responsible for these financial statements. Our responsibility is to express an opinion on these 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 audit to obtain reasonable assurance about whether the 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 audit 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 also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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 financial position of Actinium Pharmaceuticals, Inc. as of December 31, 2013 and 2012, and the results of its operations and its cash flows for each of the years then ended and for the period from June 13, 2000 (Inception) to December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ GBH CPAs, PC

GBH CPAs, PC
www.gbhcpas.com
Houston, Texas
February 28, 2014

Actinium Pharmaceuticals, Inc.
(Formerly Cactus Ventures, Inc.)
(A Development Stage Company)
Consolidated Balance Sheets

	December 31, 2013	December 31, 2012
Assets		
Current Assets:		
Cash and cash equivalents	$5,533,366	$5,618,669
Prepaid expenses and other current assets	218,389	167,143
Total Current Assets	5,751,755	5,785,812
Property and equipment, net of accumulated depreciation	13,920	3,010
Total Assets	$5,765,675	$5,788,822
Liabilities and Stockholders' Equity (Deficit)		
Current Liabilities:		
Accounts payable and accrued expenses	$378,955	$897,044
Accounts payable and accrued expenses - related parties	81,185	31,185
Notes payable	157,825	140,000
Derivative liabilities	6,707,255	3,574,958
Total Current Liabilities	7,325,220	4,643,187
Total Liabilities	7,325,220	4,643,187
Commitments and contingencies		
Stockholders' Equity (Deficit):		
Preferred stock, $0.001 par value; 50,000,000 authorized, 0 shares issued and outstanding	-	-
Common stock, $0.001 par value; 200,000,000 shares authorized; 24,565,447 and 21,391,665 shares issued and outstanding, respectively	24,565	21,392
Additional paid-in capital	64,933,145	56,867,706
Deficit accumulated during the development stage	(66,517,255)	(55,743,463)
Total Stockholders' Equity (Deficit)	(1,559,545)	1,145,635
Total Liabilities and Stockholders' Equity (Deficit)	$5,765,675	$5,788,822

See accompanying notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.

(Formerly Cactus Ventures, Inc.)
(A Development Stage Company)
Consolidated Statements of Operations

	For the Years ended December31,		For the Period From June 13, 2000 (Inception) to December 31,
	2013	2012	2013
Revenue	$-	$-	$-
Operating expenses:			
Research and development, net of reimbursements	2,666,859	3,440,485	29,087,378
General and administrative	3,919,351	4,506,232	28,424,326
Depreciation and amortization expense	1,560	581	3,264,022
Loss on disposition of equipment	4,122	-	554,308
Total operating expenses	6,591,892	7,947,298	61,330,034
Loss from operations	(6,591,892)	(7,947,298)	(61,330,034)
Other income (expense):			
Interest expense	(2,508)	(1,099,327)	(1,967,215)
Gain on extinguishment of liability	-	-	260,000
Change in fair value - derivative liabilities	(4,179,392)	685,420	(3,480,006)
Total other income (expense)	(4,181,900)	(413,907)	(5,187,221)
Net loss	$(10,773,792)	$(8,361,205)	$(66,517,255)
Net loss per common share - basic and diluted	$(0.47)	$(7.58)	
Weighted average number of common shares outstanding during the period - basic and diluted	22,752,752	1,103,521	

See accompanying notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.

(Formerly Cactus Ventures, Inc.)
(A Development Stage Company)
Consolidated Statement of Stockholders' Equity (Deficit)
For the Period from June 13, 2000 (Inception) to December 31, 2013

	Common Stock		Additional Paid-In	Deficit Accumulated during the Development	Stockholders'
	Shares	Amount	Capital	Stage	Equity (Deficit)
Balance, June 13, 2000 (Inception)	-	$ -	$ -	$ -	$ -
Issuance of founder shares	999,000	999	29,001	-	30,000
Proceeds from the issuance of stock	145,687	146	1,749,854	-	1,750,000
Net loss	-	-	-	(672,286)	(672,286)
Balance, December 31, 2000	1,144,687	1,145	1,778,855	(672,286)	1,107,714
Proceeds from the issuance of stock	187,313	187	2,249,813	-	2,250,000
Net loss	-	-	-	(5,090,621)	(5,090,621)
Balance, December 31, 2001	1,332,000	1,332	4,028,668	(5,762,907)	(1,732,907)
Proceeds from the issuance of stock	180,375	180	3,249,820	-	3,250,000
Net loss	-	-	-	(3,192,384)	(3,192,384)
Balance, December 31, 2002	1,512,375	1,512	7,278,488	(8,955,291)	(1,675,291)
Proceeds from the issuance of stock	208,992	209	6,781,041	-	6,781,250
Net loss	-	-	-	(3,532,044)	(3,532,044)
Balance, December 31, 2003	1,721,367	1,721	14,059,529	(12,487,335)	1,573,915
Proceeds from the issuance of stock	765,900	766	4,599,234	-	4,600,000
Net loss	-	-	-	(5,734,791)	(5,734,791)
Balance, December 31, 2004	2,487,267	2,487	18,658,763	(18,222,126)	439,124
Proceeds from the issuance of stock	649,350	649	3,899,351	-	3,900,000
Stock-based compensation	-	-	315,388	-	315,388
Net loss	-	-	-	(4,580,237)	(4,580,237)
Balance, December 31, 2005	3,136,617	3,136	22,873,502	(22,802,363)	74,275
Proceeds from the issuance of stock	839,042	839	7,549,702	-	7,550,541
Stock-based compensation	-	-	252,308	-	252,308
Net loss	-	-	-	(6,053,362)	(6,053,362)
Balance, December 31, 2006	3,975,659	3,975	30,675,512	(28,855,725)	1,823,762
Proceeds from the issuance of stock	732,600	733	6,599,267	-	6,600,000
Common stock issued for services	66,402	66	398,744	-	398,810
Stock-based compensation	-	-	255,061	-	255,061

Net loss	-	-	-	(5,617,581)	(5,617,581)
Balance, December 31, 2007	4,774,661	4,774	37,928,584	(34,473,306)	3,460,052
Proceeds from the issuance of stock	999,000	999	5,999,001	-	6,000,000
Stock-based compensation	-	-	269,618	-	269,618
Net loss	-	-	-	(5,570,905)	(5,570,905)
Balance, December 31, 2008	5,773,661	5,773	44,197,203	(40,044,211)	4,158,765
Stock-based compensation	-	-	112,382	-	112,382
Net loss	-	-	-	(3,425,986)	(3,425,986)
Balance, December 31, 2009	5,773,661	5,773	44,309,585	(43,470,197)	845,161
Stock-based compensation	-	-	21,166	-	21,166
Net loss	-	-	-	(467,266)	(467,266)
Balance, December 31, 2010	5,773,661	5,773	44,330,751	(43,937,463)	399,061
Proceeds from the issuance of stock	7,891,141	7,891	5,371,476	-	5,379,367
Stock-based compensation	-	-	2,173,377	-	2,173,377
Fair value of derivative warrants	-	-	(3,887,850)	-	(3,887,850)
Beneficial conversion feature	-	-	372,850	-	372,850
Net loss	-	-	-	(3,444,795)	(3,444,795)
Balance, December 31, 2011	13,664,802	13,664	48,360,604	(47,382,258)	992,010
Proceeds from the issuance of stock	4,087,747	4,088	5,125,852	-	5,129,940
Conversion of notes payable and accrued interest to stock	1,252,550	1,253	980,476	-	981,729
Shares issued at the reverse merger	2,386,566	2,387	(2,387)	-	-
Stock-based compensation	-	-	2,223,926	-	2,223,926
Fair value of derivative warrants	-	-	(4,052,089)	-	(4,052,089)
Transfer from derivative liability classification to equity classification	-	-	4,231,324	-	4,231,324
Net loss	-	-	-	(8,361,205)	(8,361,205)
Balance, December 31, 2012	21,391,665	21,392	56,867,706	(55,743,463)	1,145,635
Stock-based compensation	265,834	265	657,547	-	657,812
Proceeds from the issuance of common stock	554,310	554	2,882,703	-	2,883,257
Proceeds from exercise of options	16,650	17	13,036	-	13,053
Proceeds from exercise of warrants	2,336,988	2,337	3,465,058	-	3,467,395
Transfer from derivative liability classification to equity classification	-	-	1,047,095	-	1,047,095
Net loss	-	-	-	(10,773,792)	(10,773,792)
Balance, December 31, 2013	24,565,447	$ 24,565	$ 64,933,145	$ (66,517,255)	$ (1,559,545)

See accompanying notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(Formerly Cactus Ventures, 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,
	2013	2012	2013
Cash Flows From Operating Activities:			
Net loss	$ (10,773,792)	$ (8,361,205)	$ (66,517,255)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation	657,812	2,223,926	6,709,848
Depreciation expense	1,560	581	3,264,022
Loss on disposition of equipment	4,122	-	554,308
Amortization of debt discount	-	775,637	900,000
Amortization of deferred financing costs	-	252,248	292,692
Gain on extinguishment of liability	-	-	(260,000)
Change in fair value of derivative liabilities	4,179,392	(685,420)	3,480,006
Changes in operating assets and liabilities:			
(Increase) decrease in:			
R&D reimbursable receivable	-	234,088	-
Prepaid expenses and other current assets	106,579	(18,013)	79,436
Increase (decrease) in:			
Accounts payable and accrued liabilities	(518,089)	334,263	720,684
Accounts payable and accrued liabilities - related parties	50,000	31,185	81,185
Net Cash Used In Operating Activities	(6,292,416)	(5,212,710)	(50,695,074)
Cash Flows From Investing Activities:			
Payment made for patent rights	-	-	(3,000,000)
Purchase of property and equipment	(16,592)	(2,359)	(832,251)
Net Cash Used In Investing Activities	(16,592)	(2,359)	(3,832,251)
Cash Flows From Financing Activities:			
Borrowings on convertible debt, net of offering costs	-	-	645,888
Payments on note payable	(140,000)	-	(140,000)
Sales of stock, net of offering costs	2,883,257	5,129,940	56,074,355
Proceeds from exercise of options	13,053	-	13,053
Proceeds from exercise of warrants	3,467,395	-	3,467,395
Net Cash Provided By Financing Activities	6,223,705	5,129,940	60,060,691
Net change in cash	(85,303)	(85,129)	5,533,366
Cash at beginning of period	5,618,669	5,703,798	-
Cash at end of period	$ 5,533,366	$ 5,618,669	$ 5,533,366

Supplemental disclosures of cash flow information:			
Cash paid for interest	$ 561	$ -	$ 1,243
Cash paid for income tax	$ -	$ -	$ -
Supplemental disclosure of non-cash investing and financing activities:			
Beneficial conversion feature discount	$ -	$ -	$ 372,850
Insurance prepaid through premium finance	$ 157,825	$ 140,000	$ 297,825
Fair value of warrants issued with debt	$ -	$ -	$ 377,150
Fair value of warrants issued with stock	$ -	$ 3,393,338	$ 5,985,238
Fair value of warrants issued to the placement agent	$ -	$ 658,753	$ 2,170,282
Conversion of notes payable and accrued interest to stock	$ -	$ 981,729	$ 981,729
Transfer from derivative liability classification to equity classification	$ 1,047,095	$ 4,231,324	$ 5,278,419

See accompanying notes to consolidated financial statements.

Actinium Pharmaceuticals, Inc.
(Formerly Cactus Ventures, Inc.)
(A Development Stage Company)
Notes to Consolidated Financial Statements

Note 1 – Description of Business and Summary of Significant Accounting Policies

Nature of Business – Actinium Pharmaceuticals, Inc., formerly known as Cactus Ventures, Inc. (the "Company", "Actinium", "Cactus"), was incorporated under the laws of the State of Nevada on October 6, 1997. The Company was a shell entity that was in the market for a merger with an appropriate operating company.

On December 28, 2012, the Company entered into a transaction (the "Share Exchange"), pursuant to which the Company acquired 100% of the issued and outstanding equity securities of Actinium Pharmaceuticals, Inc. ("API"), in exchange for the issuance of approximately 99% of the issued and outstanding common stock, par value $0.01 per share, of the Company. The Share Exchange closed on December 28, 2012. As a result of the Share Exchange, the former shareholders of API became the controlling shareholders of the Company. At the closing, each API shareholder received 0.333 shares (the "Exchange Ratio") of Actinium common stock for each API share exchanged. At the closing, all of the API shareholders' options and warrants to purchase API common stock was exchanged at the Exchange Ratio for new options or warrants, as applicable, to purchase Actinium common stock. The Share Exchange was accounted for as a reverse takeover/recapitalization effected by a share exchange, wherein API is considered the acquirer for accounting and financial reporting purposes. The capital, share price, and earnings per share amount in these consolidated financial statements for the period prior to the reverse merger were restated to reflect the recapitalization in accordance with the exchange ratio established in the merger except otherwise noted.

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") 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, API launched a multi-center corporate sponsored trial in acute myeloid leukemia (AML) patients. API'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 API's compounds have been with patients having acute myeloid leukemia and it is believed that API's APIT platform will have wider applicability for different types of cancer where suitable monoclonal antibodies can be found.

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

On March 20, 2013, in anticipation of the Company changing its name to Actinium Pharmaceuticals, Inc. and its domicile from Nevada to Delaware, the Company's subsidiary, Actinium Pharmaceuticals, Inc., changed its name to Actinium Corporation. On April 11, 2013, the Company changed its domicile from the State of Nevada to the State of Delaware and changed its name from Cactus Ventures, Inc. to Actinium Pharmaceuticals, Inc.

On September 25, 2013, in accordance with a Certificate of Ownership Merging Actinium Corporation into the Actinium Pharmaceuticals, Inc. (filed in Delaware, the Company merged (the "Merger") into itself Actinium Corporation (a 93.7% owned subsidiary), and Actinium Corporation ceased to exist. As a result of the Merger, Actinium Corporation stock owned by the Company has been cancelled and each share of Actinium Corporation not

owned by the Company was exchanged for 0.333 shares of Company's common stock. A total of 3,970,137 shares of Actinium Corporation common stock was exchanged for 1,322,055 shares of Company common stock.

Development Stage Company – The Company is considered a development stage company and has had no commercial revenue to date. The Company has been focusing on the development of its clinical drug candidates.

Principles of Consolidation – The consolidated financial statements include the Company's accounts and those of the Company's wholly owned subsidiaries. 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.

Reclassification – Certain prior period amounts have been reclassified to conform to current period presentation.

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 held in banks in amounts in excess of FDIC insured limits. At December 31, 2013 and December 31, 2012, all of the Company's cash was deposited in one bank.

Property and Equipment – Machinery and equipment are recorded at cost and depreciated on a straight-line basis over estimated useful lives of three to 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.

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 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, 2013 and 2012. 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 December 31, 2013	$-	$-	$6,707,255	$6,707,255
At December 31, 2012	-	-	3,574,958	3,574,958

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. Research and development reimbursements and grants are recorded by the Company as a reduction of research and development costs.

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 value of 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 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 and warrants) were excluded from the diluted loss per common share calculation because their effect would have been antidilutive. For the year ended December 31, 2013, potentially issuable shares included stock options to purchase 1,985,384 shares and warrants to purchase 9,673,290 shares of the Company's common stock. For the year ended December 31, 2012, potentially issuable shares included stock options to purchase 2,330,134 shares and warrants to purchase 12,770,636 shares of the Company's common stock.

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 through the date the consolidated financial statements were issued for subsequent event disclosure consideration.

Note 2 – Related Party Transactions

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 February 11, 2002, the Company entered into a License, Development and Commercialization Agreement with Sloan-Kettering Institute of Cancer Research (SKI), an entity related to MSKCC ("License Agreement"). The agreement was amended in August 2006. Pursuant to the agreement, the Company licenses certain intellectual property from SKI, including critical patents with respect to the Company's core technology, and also supports ongoing research and clinical development of related drug candidates. 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.

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.

Certain amounts due under the License Agreement were deferred and then forgiven under a forbearance-related arrangement. On June 19, 2011, the Company 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 maintenance fees and research payments.

On September 4, 2013, the Company entered into a letter agreement with SKI to set forth the amount that the Company owes SKI for the period from 2011 to 2014 under the License Agreement. The total amount that the Company owes SKI for the period from 2011 to 2014 is $815,100 plus all relevant licensed intellectual property related pass through costs to be determined. The amount owed does not include amounts the Company may owe for patent expenses under the License Agreement. As of December 31, 2013, amount owed under this letter agreement for 2014 annual maintenance fee and 2014 research funding was $300,000 plus pass through costs.

On March 27, 2012, the Company entered into an additional clinical trial agreement with MSKCC Cancer Center with respect to conducting a Phase 1/2 trial of combination therapy of low dose cytarabine and fractionated dose of Lintuzumab-Ac225. The Company will pay $31,185 for each patient that has completed the clinical trial. Upon execution of the agreement, the Company paid a start-up fee of $79,623 in 2012.

For the years ended 2013 and 2012, the Company incurred $0.3 million and $0.2 million, respectively, for annual maintenance fees and research conducted by MSKCC. As of December 31, 2013 and 2012, the Company has payable to MSKCC of $81,185 and $31,185, respectively, related to clinical trials.

Dr. Rosemary Mazanet:

On January 1, 2012, the Company entered into a Consulting Services Agreement with Dr. Rosemary Mazanet, former director of the Company. 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 the Company. Since January 1, 2011, Dr. Mazanet has also received options to purchase 99,900 shares of common stock of the Company. These options have exercise prices ranging from $0.78 to $1.5 per share and have a life of 10 years. On May 31, 2013, the Consulting Services Agreement was terminated by mutual agreement of Dr. Mazanet and the Company. The Company agreed to pay Dr. Mazanet $25,000 in full satisfaction for all amounts owed under the Consulting Services Agreement. During the year ended December 31, 2013, total consulting expense paid to Dr. Mazanet, including the $25,000 settlement payment, was $50,000.

Placement Agent:

On August 7, 2012, the Company entered into an engagement agreement with its placement agent for the 2012 Common Stock Offering, of which Mr. Seth, a director of the Company, is Head of Healthcare Investment Banking. Pursuant to the agreement, the placement agent was engaged as the exclusive agent for the 2012 Common Stock Offering. In consideration for its services, the placement agent will receive (a) a cash fee equal to 10% of the gross proceeds raised in the 2012 Common Stock Offering, (b) a non-accountable expense reimbursement equal to 2% of the gross proceeds raised in the 2012 Common Stock 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 the Company's Common Stock in an amount equal to 10% of the shares of common stock issued as part of the units sold in the 2012 Common Stock 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 2012 Common Stock 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 2012 Common Stock Offering of the units, the placement agent has been engaged by the Company to provide certain financial advisory services to the Company for a period of at least 6 months for a monthly fee of $25,000. The agreement also provides that (i) if the Company 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, the Company requires a financing or similar advisory transaction the placement agent will have the right to act as the Company'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 Company board of directors must be approved by the placement agent. The placement agent also was engaged by the Company as placement agent for its Stock Offering and Convertible Notes financing in 2011 and, as a part of the fee for that engagement, designees of the placement agent also hold warrants to purchase 1,251,015 shares of the Company's Common Stock.

On December 9, 2013, the Company entered into another engagement agreement with its placement agent for the 2013 Common Stock Offering. The agreement entered in 2013 has similar terms as the 2012 agreement, including a cash fee equal to 10% of the gross proceeds raised, a non-accountable expense reimbursement equal to 2% of the gross proceeds raised and warrants to purchase shares of the Company's Common Stock in an amount equal to 10% of the shares of common stock issued or issuable. Subsequent to the closing of the 2013 offering, the placement agent continued to provide certain financial advisory services to the Company until three months after the Company has uplisted its securities for trading on a U.S. National Exchange for a monthly fee of $25,000.

During 2013, the placement agent received a cash fee of approximately $0.4 million from the sale of securities and was issued warrants to purchase 69,289 shares of the Company's Common Stock at $9 per share for a period of 5 years.

During 2012, the placement agent received a cash fee of approximately $0.7 million from the sale of securities and was issued warrants to purchase 121,095 shares of the Company's Common Stock at $0.78 per share for a period of 7 years and warrants to purchase 467,845 shares of the Company's common stock, with an exercise price of $0.78 per share and a term of 5 years.

Note 3 – Property and Equipment

Property and equipment consisted of the following at December 31, 2013 and 2012:

	Lives	2013	2012
Office equipment	3-5 years	$ 15,480	$ 156,162
Furniture and fixture	7 years	0	1,292
Total property and equipment		15,480	157,454
Less: accumulated depreciation		1,560	154,444
Property and equipment, net		$ 13,920	$ 3,010

Depreciation expense for the years ended December 31, 2013 and 2012 were $1,560 and $581, respectively.

Note 4 – Note Payable and Convertible Notes

Note Payable

On December 28, 2012, the Company entered into a premium finance agreement to pay a $140,000 premium for its director and officer liability insurance policy. Pursuant to the agreement, the Company paid a down payment of $28,000 in January 2013 and is required to pay $12,636 in monthly installment for nine months. On December 28, 2013, the Company entered into a premium finance agreement to pay a $157,825 premium for its director and officer liability insurance policy. Pursuant to the agreement, the Company paid a down payment of $15,995 in January 2014 and is required to pay $15,995 in monthly installment for nine months.

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 were initially scheduled to 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 the Company 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 the Company's stock and the Convertible Notes.

In connection with the issuance of the Convertible Notes, warrants to purchase a total of 287,061 shares of common stock were issued to investors. The Placement Agent and the Management Firm (See Note 8) were issued warrants to purchase 143,532 shares and 126,829 shares of common stock, respectively. The warrants issued to the Placement Agent are exercisable at $0.78 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, qualified for accounting treatment as a financial derivative and the Convertible Notes were determined to also have a beneficial conversion feature discount of $372,850 resulting from the conversion price of $0.78 per share which is below the fair value of $1.11 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 $292,692. These fees were 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 was also amortized over the life of the Notes on a straight-line basis.

On October 23, 2012, the investors extended the note maturity date for 90 days. The maturity date of the notes were extended to January 31, 2013, February 18, 2013 or March 27, 2013 for the 24 notes.

On December 19, 2012, the Convertible Notes and the accrued interests were automatically converted to common stock when the Company closed on an offering of its common stock in which the gross proceeds exceeded the $4,000,000 threshold. The Convertible Notes and accrued interest were converted into 1,252,550 shares of the Company's common stock.

During the year ended December 31, 2012, the Company recorded amortization expense related to the deferred financing costs and the debt discount of $0.3 million and $0.8 million, respectively.

Note 5 – 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 granted in connection with the issuance of the Company's Stock Offering and 2012 Common Stock Offering, the Convertible Notes (previously issued and converted) and the placement agent warrants granted in the Company's Stock Offering and 2012 Common Stock Offering 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.

Activities for derivative warrant instruments during the years ended December 31, 2013 and 2012 were as follows:

	Units	Fair Value
Balance, December 31, 2011	3,389,771	$4,439,613
Warrants issued with Stock Offering	242,190	318,087
Placement agent warrants related to Stock Offering	121,095	159,044
Warrants issued with 2012 Common Stock Offering-A	3,118,988	1,409,554
Warrants issued with 2012 Common Stock Offering-B	1,559,505	1,665,697
Placement agent warrants related to 2012 Common Stock Offering	467,845	499,707
Transfer from liability classification to equity classification	(3,753,056)	(4,231,324)
Change in fair value	-	(685,420)
Balance, December 31, 2012	5,146,338	3,574,958
Transfer from liability classification to equity classification	(3,177,715)	(1,047,095)
Change in fair value	-	4,179,392
Balance, December 31, 2013	1,968,623	$ 6,707,255

On December 19, 2012, as the result of the Share Exchange, it was determined that the floor for resetting the exercise price was met and the exercise price of certain warrants was fixed to be $0.26 (before Exchange Ratio adjustment). Therefore, these warrants were considered indexed to the Company's stock and qualified for the scope exception under FASB ASC 815-10 allowing for a transfer from liability classification to equity classification.

During the year ended December 31, 2013, certain warrants expired or were exercised. The fair value of these warrants measured on the expiration or exercise date was reclassified to additional paid-in capital.

The fair values of the warrants issued in the Company's stock and Convertible Notes Offering and the warrants issued to the Company's placement agent 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.

The fair values of the derivative warrants were calculated using a modified binomial valuation model with the following assumptions at each balance sheet date, the transfer date on December 19, 2012, and the date for the new grants in January and December 2012. (The market value of common stock, adjusted exercise price and offering price prior to the Share Exchange presented does not reflect the impact of the Share Exchange.)

	December 31, 2011	January 31, 2012	December 19, 2012	December 27, 2012	December 31, 2012	December 31, 2013
Market value of common stock on measurement date (1)	$0.37	$0.37	$0.39	$0.39	$0.39	$5.89
Adjusted exercise price	$0.24 - $0.26	$0.23 - $0.26	$0.41 - $0.83	$0.22 - $0.26	$0.41 - $0.83	$2.48
Risk free interest rate (2)	1.35%	1.24%	0.10% - 0.77%	0.94%	0.10% - 0.77%	1.27%
Warrant lives in years	7 years	7 years	4 months/5 years	6 years	4 months/5 years	0.5 years
Expected volatility (3)	156%	157%	125% - 161%	161%	125% - 161%	73%
Expected dividend yield (4)	-	-	-	-	-	-
Probability of stock offering in any period over 5 years (5)	25%	25%	25%	25%	25%	25%
Range of percentage of existing shares offered (6)	35%	35%	35%	35%	35%	35%
Offering price range (7)	$0.18 - $0.55	$0.13 - $0.56	$0.01 - $0.55	$0.12 - $0.60	$0.01 - $0.55	$9

(1) The market value of common stock is based on the Company's enterprise valuation at and prior to December 31, 2012. The market value of common stock at December 31, 2013 is based on the Company's trading price quoted on the OTC Markets.

(2) The risk-free interest rate was determined by management using the Treasury Bill as of the respective 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 determines the probability of future stock offering at each evaluation date.

(6) Management estimates that the range of percentages of existing shares offered in each stock offering will be 35% of the shares outstanding.

(7) Represents the estimated offering price range in future offerings as determined by management.

Note 6 – 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, 2013 and 2012 are as follows:

	2013	2012
Deferred tax assets:		
Net operating losses	$ 14,802,230	$ 14,075,122
Share-based compensation	1,661,074	1,497,556
Change in fair value – derivative liabilities	(1,420,993)	233,043
Total deferred tax assets	17,884,298	15,805,720
Less: valuation allowance	(17,884,298)	(15,805,720)
Deferred tax assets, net	$ -	$ -

As of December 31, 2013, for U.S. federal income tax reporting purposes, the Company has approximately $52.6 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, 2021. 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 years ended December 31, 2013 and 2012 are as follows:

	For the years ended December 31, 2013		December 31, 2012	
Federal income taxes at 34%	$ (3,663,089)	(34.00)%	$ (2,842,810)	(34.00)%
Share-based compensation costs	163,519	1.52%	756,136	9.04%
Change in fair value of derivatives	1,420,993	(13.19)%	(233,043)	(2.79)%
Amortization of debt discounts	-	-%	349,480	4.18%
Change in valuation allowance	2,078,577	19.29%	1,970,237	23.56%
Provision for income tax	$ -	-	$ -	-

Note 7 – Commitments and Contingencies

Employment Contract

On September 16, 2013, the Company's Board of Directors appointed Dr. Kaushik J. Dave as its new Chief Executive Officer (CEO) and Director. Material terms of the Employment Agreement are as follows:

a A base salary at an annual rate of $350,000, which will be re-evaluated upon the six month anniversary of the start date and reimbursement of certain expenses.

b The CEO shall be entitled to participate in an executive bonus program, which shall be established by the Board pursuant to which the Board shall award bonuses to the CEO, based upon the achievement of written individual and corporate objectives such as the Board shall determine. Upon the attainment of such performance objectives, the CEO shall be entitled to a cash bonus in an amount to be determined by the Board with a target of forty percent (40%) of the base salary.

c An option to purchase common shares of the Company and restricted stock (the "Grant"). The Grant will consist of (i) an option grant to purchase 675,000 common shares of the Company; (ii) 125,000 restricted shares vests based on performance and (iii) 100,000 shares of restricted stock a sign-on bonus of which fifty percent will vest at the one year anniversary of the start date upon starting work. An additional twenty-five percent each will vest at eighteen months and twenty-four months after the start date.

During the year ended December 31, 2013, the Company issued Dr. Dave options to purchase 675,000 shares of the Company's common stock at $6.70 per share for a term of 10 years and recorded option expense of $32,830 related to these options.

License and Research Agreements

The Company has entered into license and research and development agreements with third parties under which the Company is obligated to make 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 1 Clinical Trial of a licensed product	$ 750,000
(2) when Company initiates a Phase 2 Clinical Trial of a licensed product	750,000
(3) when Company initiates a Phase 3 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.

The Company met its first milestone in 2012 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 1 Clinical Trial was recorded as research and development expense. The Company has not initiated a Phase II Clinical Trial and no payment has been made to Abbott Biotherapeutics Corp. during 2013.

b. Memorial Sloan Kettering Cancer Center (MSKCC) – see related party disclosure.

c. Oak Ridge National Laboratory (ORNL) – 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. For 2013, the Company was obligated and paid approximately $0.3 million to purchase of radioactive material with ORNL. For 2014, the Company signed a contract with ORNL to purchase $0.4 million of radioactive material.

d. AptivSolutions provides project management services for the study of the drug Ac-225-HuM195 (Actimab-A) used in the Company clinical trials, Phase 1 and Phase 2. The total project is estimated to cost approximately $1.9 million 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, October 22, 2012 and May 16, 2013, the agreement was amended to provide for additional services. The total project is now estimated at approximately $2.2 million. Approximately $1.0 million has been expensed to date. AptivSolutions bills the Company when services are rendered and the Company records the related expense to research and development costs.

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). 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.

During the years ended December 31, 2013 and 2012, the Company recorded fees of $75,000 and $150,000, respectively, related to this agreement.

f. On July 19, 2012, the Company entered into a clinical trial agreement with FHCRC. The Company will pay $31,366 for each patient that has completed the clinical trial. The Company paid a start-up fee of $19,749 in 2013. During the clinical trial additional fees apply and will be invoiced when applicable.

g. 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 approximately $500,000, 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 paid $33,946.

During 2013, there was one patient treated and the Company paid $34,383 in July 2013.

h. On September 26, 2012, the Company entered into a clinical trial agreement with Johns Hopkins University. The Phase 1/2 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 Company paid the $22,847 start-up fee in February 2013.

i. On November 21, 2012, the Company entered into a clinical trial agreement with the University of Pennsylvania. The Phase 1/2 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. During 2013, the Company accrued $16,000 fee at December 31, 2013 and paid the fee in January 2014.

j. On January 27, 2014, the Company entered into a manufacturing agreement with Goodwin Biotechnology Inc. (“Goodwin”). Goodwin will oversee the current Good Manufacturing Practices (cGMP) production of a monoclonal antibody anticipated to be used in an upcoming phase 3 clinical trial of Iomab™-B. Total cost of the agreement is $2,813,960. The Company paid a non-refundable payment of $562,790 upon execution of the agreement. Periodic payments will be made upon reaching certain milestones.

On August 1, 2012, the Company entered into a rental agreement for office space at 501 Fifth Avenue, New York, NY. The agreement terminated on May 31, 2013. On June 4, 2013 and amended on October 4, 2013, the Company entered into a rental agreement for office space at 546 Fifth Avenue, New York, NY. This agreement terminates on July 6, 2014. Upon the expiration of the term, the agreement automatically renews on a month-to-month basis and requires a two month notice of termination. The Company paid a one month refundable deposit.

On February 28, 2013, the Company entered into a Separation and Settlement Agreement with its former CEO. Pursuant to the agreement, the Company paid the former CEO $125,000 on March 8, 2013 and a second payment of $125,000 on September 1, 2013. The Company also paid the former CEO a performance bonus of $60,000 for his service for the period from August 15, 2012 to December 31, 2012.

Note 8 – Equity

During 2012, the Company raised approximately $0.8 million by selling 968,759 shares of the Company's common stock and warrants to purchase 242,190 shares of the Company's common stock under an offering ("Stock Offering"). A net amount of approximately $0.7 million was received by the Company in 2012. The Company paid Laidlaw & Company (UK) Ltd. ("Laidlaw & Co.") total cash fees of $91,116, which consisted of placement agent commissions of $75,930 and expense reimbursements of $15,186. The Company also issued Laidlaw & Co. warrants to purchase an aggregate of 121,095 shares of the Company's common stock, with an exercise price of $0.78 per share and a term of 7 years. These placement agent warrants were valued at their grant date fair value of $0.2 million. In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $8,020 for its services as the placement agent's legal counsel.

In 2012, the Company also raised approximately $5.2 million through an offering of 3,118,988 shares of its common stock and "A Warrants" to purchase 3,118,988 shares of the Company's common stock, exercisable at a price of $1.65 per share for a period of 120 days from the day of the final closing of the offering, and "B Warrants" to purchase 1,559,505 shares of the Company's common stock, exercisable at a price of $2.48 per share for a period of 5 years from the date of the final closing of the offering. ("2012 Common Stock Offering") A net amount of approximately $4.5 million was received by the Company. Pursuant to the 2012 Common Stock Offering agreement, the Company paid Laidlaw & Co. total cash fees of approximately $0.7 million, which consisted of placement agent commissions of $515,145 and expense reimbursements of approximately $0.2 million. The Company also issued the placement agent warrants to purchase an aggregate of 467,845 shares of the Company's common stock, with an exercise price of $0.78 per share and a term of 5 years. These placement agent warrants were valued at $499,707 and recorded as derivative liabilities. In addition, the Company paid Laidlaw & Co.'s outside counsel, Richardson & Patel, LLP, $60,000 for its services as Laidlaw & Co.'s legal counsel and Signature Bank $3,500 for the bank escrow fee.

During 2012, the Company's convertible notes, plus accrued interest, were converted to 1,252,550 shares of the Company's common stock as a result of the 2012 Common Stock Offering.

As a result of the Share Exchange described in Note 1, the Company issued 400,000 shares to the original shareholders of the Company and 1,986,566 shares to the former shareholders of Actinium.

During 2013, the Company amended its Articles of Incorporation to change the par value of its common stock from $0.01 to $0.001. The consolidated financial statements have been retroactively adjusted to reflect this change.

In December 2013, the Company completed the sale of units pursuant the Unit Purchase Agreement, dated December 27, 2013 (the "Purchase Agreement"), and Subscription Agreement, dated December 27, 2013 (the "Subscription Agreement"), among the Company and certain accredited investors. The securities sold in the offering consisted of an aggregate of (i) 554,310 shares of its common stock, and (ii) warrants to purchase 138,577 shares of its Common

Stock at an in exercise price of $9.00 per share, subject to adjustment ("2013 Common Stock Offering"). The warrants are exercisable for a period of five years from the date of issuance. The Company received gross proceeds of approximately $3.3 million from the sale of securities under the Purchase Agreement. The transaction date fair value of the warrants of $0.4 million was determined utilizing the Black-Scholes option pricing model utilizing the following assumptions: risk free interest rate – 0.07%, expected volatility - 84%, expected dividend yield - 0%, and a contractual life of 5 years. As of December 31, 2013, all the warrants were outstanding.

As required by the Purchase Agreement, at the closing, the investors also became parties to the Registration Rights Agreement dated as of December 27, 2013 pursuant to which the Company will be required to register with the United States Securities and Exchange Commission such Shares and the shares of Common Stock underlying the Warrants (the "Warrant Shares"). If the registration statement is not filed or declared effective within the timeframe set forth in the Registration Rights Agreement, the Company is obligated to pay the investors an amount equal to of 1% of the total purchase price of the securities per month (up to a maximum of 6% in the aggregate) until such failure is cured. Officers and directors of the Company also entered into a lock-up agreements pursuant to which they agreed not to sell or otherwise transfer any shares of Common Stock or other securities of the Company owned by them until the date that is 6 months following the effective date of the registration statement to be filed in connection with the offering.

During 2013, the Company also issued 265,834 shares to certain service providers valued at $0.2 million.

Placement Agent – In connection with the money raised in 2011, the Company issued Laidlaw & Co. warrants to purchase an aggregate of 1,129,925 shares of common stock, with an exercise price of $0.78 per share. With the money raised in 2012, the Company issued Laidlaw & Co. warrants to purchase an aggregate of 588,940 shares of common stock, with an exercise price of $0.78 per share.

During December 2013, in connection with the 2013 Common Stock Offering, the Company issued Laidlaw & Co. warrants to purchase an aggregate of 69,289 shares of common stock with an exercise price of $9.00 per share. The transaction date fair value of the warrants of $0.2 million was determined utilizing the Black-Scholes option pricing model utilizing the following assumptions: risk free interest rate – 0.07%, expected volatility - 84%, expected dividend yield - 0%, and a contractual life of 5 years.

Management Firm – In 2011, the Company entered into a management agreement with Jamess Capital Group, LLC (formerly, AmerAsia Inc., "Jamess") for Jamess to provide consulting services related to funding and Actinium becoming a publicly traded entity. A director of the Company is the principal of Jamess. In 2011, the Company incurred $96,744 in management fees. In addition, Actinium issued Jamess warrants to purchase an aggregate of 1,974,774 shares of common stock, with an exercise price of $0.01 per share. The warrants have a fair value of approximately $2.2 million and included a cashless exercise provision. In 2012, the Company issued Jamess warrants to purchase 1,716,340 shares of common stock with an exercise price of $0.01 per share. The warrants have a fair value of approximately $2.0 million and included a cashless exercise provision.

Approval of the 2013 Stock Plan

In September 2013, the Board approved the Company's 2013 Stock Plan. The expiration date of the plan is September 9, 2023 and the total number of underlying shares of the Company's common stock available for grant to employees, directors and consultants of the Company under the plan is 2,750,000 shares. In December 2013, the shareholders of the Company approved the plan and increased the number of shares authorized under the plan to 5,750,000 shares.

Approval of the Equity Incentive Plan

In September 2013, the Board approved the Company's 2013 Equity Incentive Plan. The expiration date of the plan is September 9, 2023 and the total number of shares of the Company's common stock available for grant to employees, directors and consultants of the Company under the plan is 450,000 shares. In December 2013, the shareholders of the Company approved the plan and increased the number of shares authorized under the plan to 1,000,000 shares.

During 2013, the Company granted employees, consultant and board members 312,500 shares of restricted stock. 80,000 shares of restricted stock vest 1 year from the grant date, 100,000 shares have a vesting period of 24 months. The remaining restricted shares granted are performance based and vest over time. As of December 31, 2013, 265,834 shares of the 312,500 that have vested were considered issued and outstanding.

Options

Following is a summary of option activities for the two years ended December 31, 2013:

	Number of Units	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2011	273,859	1.29	5.51	-
Granted	2,056,275	0.96	8.89	
Outstanding, December 31, 2012	2,330,134	$ 0.96	8.91	$ 685,800
Granted	787,450	6.62	10.00	
Cancellation	(1,115,550)			
Exercised	(16,650)	0.78		
Outstanding, December 31, 2013	1,985,384	$ 3.23	8.34	$ 5,908,696

In February 2012, the Company re-priced 273,859 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 $1.28 per share. The Company recorded an incremental compensation cost of $34,879 as a result of the re-pricing of options.

During 2012, options to purchase 2,056,275 shares of common stock were issued to several employees and consultants at an exercise price ranging from $0.78 to $1.5 per share. These options have a term of 10 years and vest over a 4-year period. The fair value of approximately $1.5 million was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include: (1) discount rate of 1.8% (2) expected life of 7 years, (3) expected volatility of 160.44% ~ 162.49%, and (4) zero expected dividends.

During 2013, the Company granted employees and board members 787,450 options to purchase the Company's common stock with exercise prices ranging from $3.60 to $6.70 and a term of 10 years and vest over a 4-year period. The fair value of $3.7 million was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include: (1) discount rate of 1.36% - 1.55% (2) expected life of 6 years, (3) expected volatility of 83.32%~98.45%, and (4) zero expected dividends.

During 2013, the Company received gross proceeds of $13,053 for exercise of options for 16,650 shares of the Company's common stock.

All options issued and outstanding are being amortized over their respective vesting periods. The unrecognized compensation expense at December 31, 2013 and 2012 was $4.0 million and $2.0 million, respectively. During the years ended December 31, 2013 and 2012, the Company recorded option expense of $0.3 million and $0.2 million, respectively.

Warrants

Following is a summary of warrant activities for the two years ended December 31, 2013:

		Weighted

	Number of Units	Weighted Average Exercise Price	Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2011	5,364,557	$ 0.51	6.76	$ 3,261,367
Granted	7,406,079	1.32	3.76	
Outstanding, December 31, 2012	12,770,636	0.97	4.48	6,114,768
Granted	329,866	7.47	6.40	
Exercised	(2,403,429)	1.58		
Forfeited	(1,023,784)			
Outstanding, December 31, 2013	9,673,290	$ 1.06	4.89	$ 47,396,307

During the year ended December 31, 2012, warrants to purchase an aggregate of 1,716,340 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 approximately $2.00 million was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 1.82%, (2) warrant life of 7 years, (3) expected volatility of 60.64%, and (4) zero expected dividends. Since these warrants vest immediately, the Company recorded the entire fair value of approximately $2.0 million as stock-based compensation expense during the year on these warrants issued by the Company.

During the year ended December 31, 2012, the Company also issued the following warrants:

Warrants issued to investors with Stock Offering	242,189
Warrants issued to investors with 2012 Common Stock Offering	4,678,491
Placement agent warrants related to issuance of:	
Stock Offering	121,094
2012 Common Stock Offering	467,845
Warrants issued to investors with stock – accrued dividend	180,120
Total	5,689,739

During the year ended December 31, 2013, warrants to purchase 122,000 shares of common stock were granted to service providers at exercise prices ranging from $3.60 to $6.70 per share. These warrants have a term of 7~10 years. Warrants to purchase 72,000 shares of common stock vested immediately and were valued at $177,313 on the grant date. Warrants to purchase 50,000 shares of common stock vest over a year and were valued at $235,737 on the grant date. The fair value on the grant date was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model include (1) discount rate of 1.55%~1.36%, (2) expected term of 5 years, (3) expected volatility of 91.56%, and (4) zero expected dividends. As of December 31, 2013, unrecognized compensation expense related to the warrants was $226,049.

During the year ended December 31, 2013, the Company also issued warrants to purchase 138,577 shares of the Company's common stock to investors and warrants to purchase 69,289 shares of the Company's common stock to its placement agent in connection with the 2013 Common Stock Offering.

During the year ended December 31, 2013, 2,403,429 warrants were exercised by the warrant holders. The Company issued 2,336,988 shares of common stock and received gross proceeds of approximately $3.5 million.

During the years ended December 31, 2013 and 2012, the Company recorded stock-based compensation related to the warrants of approximately $0.2 million and $2.0 million, respectively.

Note 9 – Employee Defined Contribution Plan

In 2004, the Company established an employee defined 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, 2013 and 2012 was approximately $13,000 and $9,000, respectively.

Note 10 – Subsequent Events

During the first quarter of 2014, 5,000 warrants were exercised by the warrant holders at $0.78 per share into 5,000 shares of the Company's common stock and 245,461warrants were exercised by the warrant holder under a cashless exercise option into 202,721 shares of the Company's common stock.

In January 2014, the Company completed the final tranche of a private placement of the Company's common stock and warrants and received approximately $3.3 million total gross proceeds from accredited investors ("2014 Closing"). In the 2014 Closing, the Company sold 551,810 shares of common stock at $6.00 per share and granted 137,952 units of five-year warrants with an exercise price of $9.00 per share.

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ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

There were no disagreements related to accounting principles or practices, financial statement disclosure, internal controls or auditing scope or procedure during the two fiscal years and interim periods, including the interim periods up through the date the relationship ended.

ITEM 9A. CONTROLS AND PROCEDURES.

Disclosure controls and procedures. The Company, under the supervision and with the participation of its management, including the Company's principal executive officer and principal financial and accounting officer, evaluated the effectiveness of the Company's "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Act of 1934, as amended (the "Exchange Act"), as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, the Company's principal executive officer and principal financial and accounting officer have concluded that the Company's disclosure controls and procedures are effective as of December 31, 2013 to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and includes controls and procedures designed to ensure that information required to be disclosed by the Company in such reports is accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial and accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's internal control over financial reporting includes policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; (2) provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework. Based on our assessment and those criteria, management concluded that as of December 31, 2013, the Company's internal control over financial reporting was not effective and that the remediation plan set forth for this material weakness was still in process.

The matters involving internal controls that the Company’s management considered to be material weaknesses under COSO were (1) insufficient written policies and procedures for accounting and financial reporting and (2) ineffective controls over period end financial disclosure and reporting processes. Management believes that the material weakness set forth above did not have an effect on the Company’s financial results reported herein. We are committed to improving our financial organization. Management believes that by preparing and implementing sufficient written policies and checklists will remedy the material weaknesses identified above. We are in the process of actively seeking a Chief Financial Officer.

This annual report does not include an attestation report of the Company’s registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

Changes in internal controls over financial reporting. There were no changes in the Company's internal controls over financial reporting that occurred during the fourth quarter of the fiscal year covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

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

(a) Resignation of Officer

On February 28, 2014, Mr. Sergio Traversa resigned as Interim Chief Financial Officer of the Company. Mr. Traversa will remain a director of the Company. As Mr. Traversa's term as an Interim Officer of the Company was less than twelve months, Mr. Traversa will be deemed by the Company's board of directors to be an independent director under stock exchange rules.

(b) Appointment of Directors and Officers

On February 28, 2014, our board of directors appointed our President and Chief Executive Officer, Dr. Kaushik J. Dave, as our Interim Chief Financial Officer.

For the background and experience of Dr. Dave refer to Part III, Item 10 (Background of Executive Officers and Directors) of this report.

Compensatory Plan with Dr. Dave

Dr. Dave's compensatory plan with the Company is described under Part III, Item 11 (Employment Agreements) of this Report.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Directors And Executive Officers

The names, positions and ages of our directors and executive officers as of February 28, 2014, are as follows:

Name	Age	Position
Sandesh Seth, MS, MBA	49	Chairman of the Board
Kaushik J. Dave, PhD, MBA	52	President, Chief Executive Officer, Interim Chief Financial Officer and Director (Principal Executive Officer and Principal Financial and Accounting Officer)
Dragan Cicic, MD	49	Chief Operating Officer and Chief Medical Officer
David Nicholson, PhD	58	Director
Richard I. Steinhart	56	Director
Sergio Traversa, MBA	52	Director

Subject to the classified board provisions of our charter, all directors hold office until the next annual meeting of stockholders and the election and qualification of their successors. Officers are elected annually by the board of directors and serve at the discretion of the board.

Pursuant to the Company's charter, Mr. Traversa and Mr. Seth were appointed as directors of the Company by the former Series E preferred stock holders of Actinium Corporation. During 2011, Actinium Corporation raised $6.2 million 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). In January 2012, the Actinium Corporation raised $0.8 million through its final offering of the 2011 Series E preferred shares.

There are no other arrangements or understanding between any of our directors and any other persons pursuant to which they were selected as a director.

Background of Executive Officers and Directors

The principal occupations for the past five years (and, in some instances, for prior years) of each of our directors and executive officers are as follows:

Sandesh Seth, MS, MBA, Director

Mr. Sandesh Seth has been our Director since March 2012 and our Chairman of the Board since October 2013. Mr. Seth is the Head of Healthcare Investment Banking at Laidlaw & Company (UK) Ltd. and has over 20 years of experience which includes prior 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 100+ 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 United States FDA regulations. He also holds the following Securities Industry Licenses: Series 7, 79 and 63.

That Mr. Seth has served in various business executive-level positions over the course of his career, has significant investment banking experience, has developed significant management and leadership skills and is well accustomed to interfacing with investors, analysts, auditors, C-level executives, and outside advisors, led us to conclude that Mr. Seth should serve as a director.

Kaushik J. Dave, PhD, MBA, President, Chief Executive Officer, Interim Chief Financial Officer and Director

Dr. Kaushik J. Dave has been our President, Chief Executive Officer and Director since September 2013, and our Interim Chief Financial Officer since February 2014. From March 2008 to September 2013, Dr. Dave was the Executive Vice President of Product Development for Antares Pharmaceuticals Inc. (Antares). As part of the core management team at Antares, he was instrumental in setting strategy, vision, product portfolio development and business development. Dr. Dave led the clinical and regulatory approval of Anturol™ and was also a key contributor to the change in company vision to combination products using Antares' medical device technology which resulted in a robust pipeline that included development and New Drug Application submission for Otrexup, which was approved on October 14, 2013. From January 2001 to June 2006, Dr. Dave was Vice President Product Development at Palatin Technologies Inc. where he obtained approval of NeutroSpecTM (a radiopharmaceutical monoclonal antibody product). From January 1997 to December 2000, Dr. Dave was employed at Schering-Plough Inc. and Merck & Co. Inc., responsible for steering the development of several pharmaceutical product development programs. Dr. Dave received his pharmacy degree from the University of Bath, UK and a Ph.D. in Pharmaceutical Chemistry from the University of Kansas. Dr. Dave also received an MBA from the Wharton School of the University of Pennsylvania.

As President and Chief Executive Officer of the Company, Dr. Dave is the most senior executive of the Company and as such provides our Board of Directors with the greatest insight into the Company's business and the challenges and material risks it faces. Dr. Dave has more than 23 years of healthcare industry experience and is especially qualified to understand the risks and leadership challenges facing a growing pharmaceutical company from a senior management and financial expertise perspective led us to conclude that Dr. Dave should serve as President, Chief Executive Officer and Director of the Company.

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

Dragan Cicic is the Chief Operating Officer and Chief Medical Officer of the Company. He joined the Company in 2005 and previously held the position of the CEO and prior to that of the Medical Director at Actinium. Dr. Cicic joined Actinium 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.

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 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, 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. Dr. Nicholson is presently on the Board of Directors of multiple biotechnology companies, including Actinium Pharmaceuticals, Inc.

That Dr. Nicholson brings over 25 years of pharmaceutical experience to our Board, Having served in various pharmaceutical research and development executive-level positions over the course of his career, and that Dr. Nicholson has developed significant management and leadership skills relating to the pharmaceutical industry. and is well accustomed to interfacing with investors, analysts, auditors, outside advisors and governmental officials, led us to conclude that Dr. Nicholson should serve as a director.

Richard I. Steinhart, Director

Richard I. Steinhart has served as our Director and Chairman of the Audit Committee since November 2013. Mr. Steinhart is also a member of our Compensation Committee. Through December 2013, Mr. Steinhart was employed by MELA Sciences, Inc, as their Vice President, Finance and Chief Financial Officer, Treasurer and Secretary since April 2006 and in April 2012, Mr. Steinhart received a promotion to Sr. Vice President, Finance. From May 1992 until joining the Company Mr. Steinhart was a Managing Director of Forest Street Capital/SAE Ventures, a boutique investment banking, venture capital, and management consulting firm focused on healthcare and technology companies. Prior to Forest Street Capital/SAE Ventures, he was Vice President and Chief Financial Officer of Emisphere Technologies, Inc. Mr. Steinhart's other experience includes seven years at CW Group, Inc., a venture capital firm focused on medical technology and biopharmaceutical companies, where he was a General Partner and Chief Financial Officer. Until December 2011, Mr. Steinhart served on the Board of Manhattan Pharmaceuticals, Inc., a biopharmaceutical company and was Chairman of its Audit Committee. Mr. Steinhart began his career at Price Waterhouse, now known as PricewaterhouseCoopers. He holds B.B.A. and M.B.A degrees from Pace University and is a Certified Public Accountant (inactive).

That Mr. Steinhart brings over 20 years of financial experience to our Board, having served in various financial executive-level positions over the course of his career, and that Mr. Steinhart is a certified public accountant led us to conclude that Mr. Steinhart should serve as a director and chair the audit committee.

Sergio Traversa, Director

Mr. Traversa has been a Director of the Company since August, 2012. Mr. Traversa is also 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. Mr. 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 United States investment firms specializing in healthcare, including Mehta and Isaly and Mehta partners, ING Barings, Merlin BioMed and Rx Capital. Mr. 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. Mr. 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. Mr. 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.

Mr. Traversa is a senior executive in the pharmaceutical industry and as such provides our Board of Directors with great insight into the Company's business and the challenges and material risks it faces. That Mr. Traversa has more than 25 years of healthcare and financial industry experience in the United States and Europe and is especially qualified to understand the risks and leadership challenges facing a growing pharmaceutical company from a senior management and financial expertise perspective led us to conclude that Mr. Traversa should serve as a director.

Corporate Governance

The business and affairs of the Company are managed under the direction of the Board of Directors.

Term of Office

Our directors are divided into three classes, designated Class I, Class II and Class III. Class I shall consists of two directors, Class II shall consist of two directors, and Class III shall consist of the chief executive officer.

The term of each director is set forth below or until their successors are duly elected:

Director	Class	Term (from 2013 Annual Meeting)
Kaushik Dave	Class III	36 months
David Nicholson	Class I	12 months
Sandesh Seth	Class II	24 months
Sergio Traversa	Class II	24 months
Richard Steinhart	Class I	12 months

Notwithstanding the foregoing, each director shall serve until his successor is duly elected and qualified, or until his or her retirement, death, resignation or removal. In order to implement a staggered board of directors, Class I shall serve a 12 month term from the date of the 2013 Annual Shareholders Meeting (December 2013); Class II shall serve a 24 month term from the date of the 2013 Annual Shareholders Meeting; and Class III shall serve a 36 month term from the date the date of the 2013 Annual Shareholders Meeting. Directors elected at each annual meeting commencing in 2014 shall be elected for a 3 year term.

Director Independence

We use the definition of "independence" of the NYSE MKT to make this determination. We are not listed on the NYSE MKT, so although we use its definition of "independence", its "independence" rules are inapplicable to us. NYSE MKT corporate governance rule Sec. 803(A)(2) provides that an "independent director" means a person other than an executive officer or employee of the company. No director qualifies as independent unless the issuer's board of directors affirmatively determines that the director does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The following is a non-exclusive list of persons who shall not be considered independent under NYSE MKT rules:

a director who is, or during the past three years was, employed by the company, other than prior employment as an interim executive officer (provided the interim employment did not last longer than one year);

a director who accepted or has an immediate family member who 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, other than the following:

(i) compensation for board or board committee service,
(ii) compensation paid to an immediate family member who is an employee (other than an executive officer) of the company,
(iii) compensation received for former service as an interim executive officer (provided the interim employment did not last longer than one year) (See Commentary .08), or
(iv) benefits under a tax-qualified retirement plan, or non-discretionary compensation;

a director who is an immediate family member of an individual who is, or at any time during the past three years was, employed by the company as an executive officer;

a director who is, or has an immediate family member who 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 (other than those arising solely from investments in the company's securities or payments under non-discretionary charitable contribution matching programs) that exceed 5% of the organization's consolidated gross revenues for that year, or $200,000, whichever is more, in any of the most recent three fiscal years;

a director who is, or has an immediate family member who is, employed as an executive officer of another entity where at any time during the most recent three fiscal years any of the issuer's executive officers serve on the compensation committee of such other entity; or

a director who is, or has an immediate family member who is, a current partner of the company's outside auditor, or was a partner or employee of the company's outside auditor who worked on the company's audit at any time during any of the past three years.

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 above-mentioned NYSE MKT director independence rules David Nicholson, Richard Steinhart and Sergio Traversa are the only independent directors of the Company.

Committees of the Board of Directors

Our board of directors has formed two standing committees: audit and compensation. 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 Committee
Richard I. Steinhart*	Dr. David Nicholson*
Dr. David Nicholson	Sandesh Seth
	Richard I. Steinhart

* Indicates committee chair

Audit Committee

Our audit committee, which currently consists of two 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. Richard I. Steinhart was determined as a chairman of the audit committee.

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 as Exhibit 14.1 to the Form 8-K filed on January 2, 2013.

Compliance with Section 16 (a) of the Exchange Act

Under Section 16(a) of the Exchange Act, our directors and certain of our officers, and persons holding more than 10 percent of our common stock are required to file forms reporting their beneficial ownership of our common stock and subsequent changes in that ownership with the United States Securities and Exchange Commission.

Based solely upon a review of copies of such forms filed on Forms 3, 4, and 5, and amendments thereto furnished to us, except for David Nicholson – a Director of the Company, and Sandesh Seth for a restricted stock grant on August 8, 2013, and Sergio Traversa for a restricted stock grant on August 8, 2013, we believe that as of the date of this Report, our executive officers, directors and greater than 10 percent beneficial owners have complied on a timely basis with all Section 16(a) filing requirements.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table

The following table provides information regarding the compensation earned during the fiscal years ended December 31, 2013, December 31, 2012 and December 31, 2011 by our Chief Executive Officer and the two next most highly compensated executive officers.

Name/Position	Year	Salary	Bonus	Option Awards	All Other Compensation	Total
Kaushik J. Dave, President and CEO (3)	2013	$ 112,134	$ -	$ 32,830	$ -	$ 114,964
	2012	-	-	-	-	-
	2011	-	-	-	-	-
Jack Talley, former CEO, resigned on February 28, 2013	2013	$ 367,692	$ --	$ --	$ -	$ 367,692
	2012	250,000	-	58,412	-	308,412
	2011	-		-	-	-
Dragan Cicic, COO	2013	$ 220,450	$ 75,000	$ 58,426	$ -	$ 295,450
	2012	190,658	-	9,717	-	249,084
	2011	190,658	50,000		-	250,375
Enza Guagenti, former CFO, resigned on March 9, 2013	2013	$ 41,486	$ -	$ 1,180	$ -	$ 42,666
	2012	90,000	-	3,394	-	93,394
	2011	-	-	-	-	-
Diane Button, CEO, CFO (1)	2013	$ -	$ -	$ -	$ -	$ -
	2012	$ -	$ -	$ -	$ -	$ -
	2011	$ -	$ -	$ -	$ -	$ -

(1) Ms. Diane Button resigned as the Company's CEO and CFO on December 28, 2012.

(2) Dr. Cicic's options awards were determined by taking into consideration the following factors: (i) Dr Cicic's responsibilities at the Company; (ii) his performance historically and as an incentive for future efforts; (iii) compensation data taken from peer group companies (newly public biotech firms); and (iv) the level of his past awards.

(3) Dr. Kaushik J. Dave became the Company's President and CEO on September 16, 2013.

As an "emerging growth company" we will not be required to provide information relating to the ratio of total compensation of our Chief Executive Officer to the median of the annual total compensation of all of our employees, as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Director Compensation

Historically non-management Directors of the Company do not receive any cash compensation. Commencing October 1, 2012, non-management Directors of Actinium Corporation (and now the Company) began to 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 below.

The following table sets forth the compensation of our directors for the 2013 fiscal year:

Name(1)	Fees Earned or Paid in Cash	Stock Awards	Option Awards	All Other Compensation	Total
David Nicholson	$ 30,000	10,000	-	-	$30,000
Sandesh Seth	$ 30,000	10,000	-	-	$30,000
Richard Steinhart	$ 4,484	-	49,950	-	$4,484
Sergio Traversa	$ 30,000	10,000	20,000	-	$30,000

David Nicholson, Sandesh Seth and Sergio Traversa were each granted 10,000 shares restricted stock on August 8, 2013. Sergio Traversa was granted 20,000 options on August 8, 2013 with an exercise price of $3.60 per share. Richard Steinhart was granted 49,950 options on December 16, 2013 with an exercise price of $6.70 per share.

Under the terms of our Director Compensation Program, the non-employee members of our Board of Directors are paid a fixed annual fee of $30,000 payable in four quarterly payments.

Employment Agreements

Compensatory Plan with Kaushik Dave (Principal Executive Officer)

Effective September 16, 2013, the Company and Dr. Kaushik J. Dave entered into an agreement (the "Employment Agreement"), to employ Dr. Dave as the Company's Chief Executive Officer. Dr. Dave shall have such responsibilities, duties and authority as are assigned to him by the Board, or its designee. These responsibilities shall include implementation of the overall direction of the Company as set by the Board, including, planning, corporate policies, research and development, staffing, finance and operations. Dr. Dave shall perform such other duties and shall have authority consistent with his position as may be from time to time specified by the Board and subject to the discretion of the Board. Dr. Dave reports directly to the Board. Dr. Dave also agreed to devote his best efforts and substantially all of his business time to advance the interests of the Company and to discharge adequately his duties under the Employment Agreement. Dr. Dave may hold up to two board seats on for-profit and not-for-profit boards that do not represent a conflict with the Company and subject to Board approval after review of the time commitment involved.

Pursuant to the Employment Agreement, Dr. Dave is entitled to the following compensation and benefits:

A base salary at an annual rate of $350,000.

Upon the six month anniversary of the start date, the Board will review Dr. Dave's base salary with the help of an independent compensation consultant to adjust the base salary to be competitively aligned to a range between the 25th (twenty-fifth) and 75th (seventy-fifth) percentile of the relevant market data of CEO positions of similarly situated publicly traded Biotech companies. The Board shall review the amount of the base salary and performance bonus, and shall determine the appropriate adjustments to each component of Dr. Dave's compensation within 60 days of the start of each calendar year.

In addition, for the duration that the Company maintains its primary office in New York City, the Company will reimburse Dr. Dave for up to $500 per month in travel expenses plus the dollar amount of the difference between Dr. Dave's New York State and New Jersey State taxes based on income from the Company.

Dr. Dave shall be entitled to participate in an executive bonus program, which shall be established by the Board pursuant to which the Board shall award bonuses to Dr. Dave, based upon the achievement of written individual and corporate objectives such as the Board shall determine. Upon the attainment of such performance objectives, Dr. Dave shall be entitled to a cash bonus in an amount to be determined by the Board with a target of forty percent (40%) of the base salary. Within thirty (30) days after the start date, the Board shall establish written individual and corporate performance objectives for the balance of 2013 and the amount of the performance pro-rata bonus payable upon the attainment of each objective. At least thirty (30) days before each subsequent calendar year, the Board shall establish written individual and corporate performance objectives for such calendar year and the amount of the performance bonus payable upon the attainment of such objectives. Within sixty (60) days after the end of each calendar year, the Board shall determine the amount of any performance bonus payable thereunder. Any such performance bonus shall be due and payable within ninety (90) days after the end of the calendar year to which it relates.

The Board has agreed to grant to Dr. Dave an option to purchase common shares of the Company and restricted stock (the "Grant"). The Grant will consist of (A) an option grant to purchase 675,000 common shares of the Company; (B) 125,000 shares of restricted and (C) 100,000 shares of restricted stock as a sign-on bonus of which fifty percent will vest at the one year anniversary of the start date upon starting work. An additional twenty-five percent each will vest at eighteen months and twenty-four months after the start date.

Stock Options. Such options will have an exercise price equal to the prior day closing price of the Company's common stock which is equal to fair market value as determined by the Board on the date of the grant (the "Grant date"). The Grant Date shall occur no later than 90 days from the start date.

Restricted Stock Grant (excluding the sign-on bonus). One third (33.33%) of the restricted stock shall be granted upon the next closing of a financing of the Company of at least $5 million, and shall vest per the vesting schedule below. The remaining two thirds (66.66%) of the restricted stock shall be granted upon the treatment of the first patient in 2014 for the Iomab™-B trial and subject to the vesting schedule below.

Vesting Schedule. Twenty-eight percent (28%) of the initial options or restricted stock granted shall vest twelve months after the date of grant and two percent (2%) of the remainder shall vest each month thereafter until fully vested. Such additional options or restricted stock will have an exercise price per share which is equal to fair market value as determined by the Board on the date of the grant. Two percent (2%) of such additional options or stock shall vest each month thereafter until fully vested. The term of all options granted under this Agreement will be for 10 years from the date of grant, subject to Dr. Dave's continuing service with the Company.

Dr. Dave is also eligible to participate in the Company's benefit plans that are generally provided for executive employees.

The employment agreement also contains a non-solicitation provision that provides that during the term of employment and for a period of 24 months following the cessation of employment with the company you Dr. Dave shall not directly or indirectly solicit, induce, recruit or encourage any of the Company's employees or consultants to terminate their relationship with the Company, or attempt any of the foregoing, either for himself or any other person or entity

On July 23, 2012, Actinium Corporation entered into an employment agreement with Jack Talley, as our, Chief Executive Officer. The initial term of employment was for a period of three (3) years, provided that Mr. Talley's employment with the company will be on an "at will" basis. Actinium Corporation agreed to pay a base salary of $250,000 per annum. The board will review Mr. Talley's base salary with help of an independent compensation consultant to adjust his base salary to be competitively aligned to a range between the 25th and 75th percentile of the relevant market data of CEO positions of similarly situated publicly traded biotech companies. Mr. Talley was also entitled to participate in an executive bonus program, which shall be established by the board pursuant to which the board shall award bonuses to Mr. Tally, based on achievement of written individual and corporate objectives such as the board shall determine. Upon the attainment of such performance objectives, in addition to base salary, Mr. Talley was entitled to a cash bonus in an amount to be determined by the Board up to fifty percent (50%) of his base salary. Actinium Corporation also agreed to grant to Mr. Talley an option grant to purchase common shares of the Company equal to three percent (3.0%) of the Company's issued and outstanding equity (common and preferred shares) on a fully diluted basis. Such options had an exercise price of $0.261 cents per share which is equal to fair market value as determined by the board on the date of the grant. Twenty-eight percent (28%) of the initial options granted shall vest twelve months after the date of grant and two percent (2%) of the remainder shall vest each month thereafter until fully vested. Additional options were to be granted upon the final closing of the Company's next financing so that total options granted would equal three percent (3%) of fully diluted shares on that date. Such additional options will have an exercise price per share which is equal to fair market value as determined by the Board on the date of the grant. Two percent (2%) of such additional options shall vest each month thereafter until fully vested. The term of all options granted under this Agreement will be for 10 years from the date of grant, subject to your continuing service with the Company. On February 28, 2013, Mr. Talley resigned as Chief Executive Officer and Director of the Company and Actinium Corporation as per the terms of the Severance Agreement (as described below).

On January 2, 2006, Actinium Corporation entered into an employment agreement with Dragan Cicic, as our, Chief Operating Officer and Chief Medical Officer. The term of the employment agreement is one year; provided that the term shall be automatically extended for successive one year periods thereafter, unless, no later than 60 days prior to the expiration of any successive one-year renewal term, either party thereto provides the other party written notice of its desire not to extend the term. Actinium agreed to pay a base salary of $144,758 per annum during the term with an annual percentage increase of not less than an amount equal to the aggregate preceding 12 months annual percentage increase of the U.S. Department of Labor Consumer Price Index for All Urban Consumers (CPI-U) for the New York area. Mr. Cicic is also entitled to participate in any incentive compensation or bonus program which is instituted or maintained for company executives generally during the term of the agreement.

On July 21, 2012, Actinium entered into an employment agreement with Enza Guagenti, as our Chief Financial Officer. Ms. Guagenti's employment with the Company is on an "at will" basis, meaning that either Ms. Guagenti or the Company may terminate your employment at any time for any reason or no reason, without further obligation or liability, except that upon termination of Ms. Guagenti's employment by the Company other than for cause Ms. Guagenti will be entitled to severance equal to 3 months base salary. In the event that a) the Company hires a CFO other than yourself, and 2) within two years thereafter Ms. Guagenti's base salary is reduced below $115,000 per year, Ms. Guagenti may then within thirty days after the base salary reduction resign her position with the Company and collect the severance. Actinium Corporation agreed to pay an initial base salary of $90,000. Ms. Guagenti's annual base salary will be increased to one hundred fifteen thousand dollars ($115,000) on the six month anniversary of the start date. Thereafter, before the beginning of each calendar year during the term of her employment, beginning in January 2014, the board shall review the amount of Ms. Guagenti's base salary and performance bonus, and shall determine the appropriate adjustments to each component of her compensation for the following calendar year. The Company also agreed to grant to Ms. Guagenti an option grant to purchase 75,000 common shares of the Company. Such options will have an exercise price of $0.261 cents per share which is equal to fair market value as determined by the board on the date of the grant. Two percent (2%) of the options granted shall vest each month after the date of grant until fully vested. The term of all options granted under this Agreement will be for 10 years from the date of

initial grant, subject to Ms. Guagenti's continuing service with the Company. On March 9, 2013, Ms. Guagenti resigned as Chief Financial Officer of the Company and Actinium Corporation. Pursuant to the terms of the employment agreement, Ms. Guagenti did not receive any severance payments upon resignation.

Severance Agreement

On February 28, 2013, the Company entered into a Separation and Settlement Agreement with the Company's former Chief Executive Officer (the "Separation Agreement"). The material terms of the Separation Agreement are included in a Form 8-K filed by the Company with the SEC on February 28, 2013.

Agreement with former Director.

On May 31, 2013, Dr. Rosemary Mazanet resigned as a director of the Company and Actinium Corporation, a subsidiary of the Company, to pursue other opportunities. Dr. Mazanet's decision to resign from the board of directors of the Company was not based upon any disagreement with the Company on any matter relating to the Company's operations, policies or practices as contemplated by Item 5.02(a) of Form 8-K. The material terms of an agreement entered into with Dr. Mazanet is included in a Form 8-K filed by the Company with the SEC on May 31, 2013.

Outstanding Equity Awards at Fiscal Year-End Table

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END - 2013

The following table sets forth all unexercised options and unvested restricted stock that have been awarded to our named executives by the Company and were outstanding as of December 31, 2013.

	Option Awards					Stock Awards			
Name (a)	Number of Securities Underlying Unexercised Options (#) (Exercisable) (b)	Number of Securities Underlying Unexercised Options (#) (Unexercisable) (c)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) (d)	Option Exercise Price ($) (e)	Option Expiration Date (f)	Number of Shares or Units of Stock That Have Not Vested (#) (g)	Market Value of Shares or Units of Stock That Have Not Vested() ($) (h)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) (i)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested(($) (j)
Kaushik J. Dave	-	675,000	-	6.70	12/16/2023	225,000	1,507,500	-	-
Dragan Cicic	48,485	-	-	0.78	10/25/2016	-	-	-	-
	33,300	-	-	0.78	11/28/2017	-	-	-	-
	149,850	183,150	-	0.78	02/10/2022	-	-	-	-
	15,984	33,966	-	1.50	08/30/2022	-	-	-	-
	12,488	37,463	-	1.50	12/19/2022	-	-	-	-
Sergio Traversa	7,992	16,983		1.50	08/30/2022				
	6,244	18,731		1.50	12/19/2022				
	-	20,000		3.60	08/08/2023			10,000	36,000

Indemnification of Directors and Officers

Section 102(b)(7) of the Delaware General Corporation Law allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the directors breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides for this limitation of liability.

Section 145 of the General Corporation Law of the State of Delaware provides that a Delaware corporation may indemnify any person who was, is or is threatened to be made, 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 such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his conduct was illegal. A Delaware corporation may indemnify any persons who are, or were, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests, provided that no indemnification is permitted without judicial approval if the officer, director, employee or agent is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or directors has actually and reasonably incurred.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145.

Our bylaws provide that we will indemnify our directors and officers to the fullest extent authorized by the General Corporation Law of the State of Delaware. Expenses (including attorneys' fees) incurred by an officer or director of the Corporation in defending any civil, criminal, administrative or investigative 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 under Delaware law. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents of the Company or by persons serving at the request of the Company as directors, officers, employees or agents of another corporation, partnership, joint venture, trust or other enterprise may be so paid upon such terms and conditions, if any, as the Company deems appropriate.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any 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 continue as to a person who has ceased to be a director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

We maintain a general liability insurance policy that covers liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Actinium Holdings Ltd. Indemnification

Pursuant to a letter Agreement dated, July 2011, between API and Actinium Holdings Ltd., API agreed to indemnify certain officers and directors of a predecessor company. Pursuant to the agreement, API will not, and will not permit any of its subsidiaries to, eliminate or otherwise reduce the right of any present or former director or officer of API, Actinium Pharmaceuticals Limited, a Bermuda corporation that merged into the Company ("APL"), and/or the present and former subsidiaries of API or APL (all such entities, collectively, the "Company Group") who currently serves, or at any time prior to the date thereof served, in any such capacity (all such directors and officers, collectively "Company Group Managers") to be indemnified against any costs or expenses (including reasonable attorneys' fees), judgments, fines, losses, claims, damages or liabilities of any nature whatsoever, incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to matters existing or occurring on, prior to or after the date thereof, whether asserted or claimed prior to, on or after the date thereof, arising, in whole or in part, out of or pertaining to the fact that he or she is or was, or at any time in the future will have been, a Company Group Manager or is or was, or at any time in the future will have been, serving at the request of any entity in the Company Group (or at the request of any present or former affiliate (as such term is defined in Rule 405 under the Securities Act of 1933, as amended) of API for and on behalf of any entity in the Company Group as a director, officer, employee, fiduciary or agent of another corporation, partnership, joint venture, trust, other entity or otherwise, or to be advanced expenses, in any of the foregoing cases, to the fullest extent that such Company Group Manager would be entitled to be indemnified or advanced expenses under applicable law, API's or any such subsidiaries' certificate or articles of incorporation or bylaws or equivalent documents or any applicable contract (collectively, the "Applicable Documents"), in each case, as in effect on the date thereof.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any 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 continue as to a person who has ceased to be a director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

We maintain a general liability insurance policy that covers liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

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.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows the beneficial ownership of our Common Stock as of February 26, 2014 held by (i) each person known to us to be the beneficial owner of more than five percent (5%) of any class of our shares; (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 February 26, 2014, 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 as of February 26, 2014. Unless otherwise indicated, the principal address of each of the persons below is c/o Actinium Pharmaceuticals, Inc., 501 Fifth Avenue, 14th floor, New York, NY 10017.

Executive Officers and Directors	Number of Shares of Common Stock and Preferred Stock Beneficially Owned	Percentage of Ownership(a)
Kaushik Dave, PhD	41,663(1)	*%
Dragan Cicic, MD	262,409(2)	1.1%
David Nicholson, PhD	64,556(3)	*%
Sandesh Seth	185,343(4)	*%
Richard I. Steinhart	0 (5)	0%
Sergio Traversa, Pharm. D.	23,779(6)	*%
All Directors and Officers as a Group (4 persons)	536,087	2.2%
All other 5% holders		
Actinium Holdings Ltd. (7) c/o Sterling Management Limited P.O. Box HM 1029 Hamilton HM CX	5,702,387	22.9%

* less than 1%

(a) Based on 24,903,150 shares of Common Stock outstanding as of February 26, 2014, and includes 400,000 shares of common stock of the Company that remained outstanding after the closing of the Share Exchange.

(1) Options to purchase an aggregate of 675,000 shares of Common Stock of the Company at an exercise price of $6.70 per share which none will have vested within 60 days of February 26, 2014. Includes 41,663 shares of common stock.

(2) Options granted to purchase an aggregate of 333,000 shares of Common Stock of the Company at an exercise price of $0.784 per share, options to purchase an aggregate of 99,900 shares of Common Stock of the Company at an exercise price of $1.50 per share, and options to purchase an aggregate of 81,784 shares of Common Stock of the Company at an exercise price of $1.35 per share. All shares are subject to vesting. 262,409 shares of Common Stock will have vested within 60 days of February 26, 2014.

(3) 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. 64,556 shares of Common Stock will have vested within 60 days of February 26, 2014.

(4) 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 99,617 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 375,556 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 December 28, 2012, the closing date of the going Share Exchange; or for six months after the Registration Statement of which this prospectus is a part is declared effective. Excludes 353,023 warrants issued to Carnegie Hill Asset Partners and irrevocable trust linked to Mr. Seth’s family and 721,068 warrants issued to Bioche Asset Management, LLC, a partnership in which the majority member interest is owned by the family of Mr. Seth 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 of common stock and Series A and Series B warrants that closed on December 19, 2012 (the “2012 Offering”), the Bridge Notes Financing, the Series E financing and by designees of Jamess Capital Group, LLC in connection with the Share Exchange. Also includes 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. 20,979 shares of Common Stock will have vested within 60 days of February 26, 2014.

(5) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $6.70 per share which none will have vested within 60 days of February 26, 2014.

(6) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. Options to purchase an aggregate of 20,000 shares of Common Stock of the Company at an exercise price of $3.60 per share. 23,779 shares of Common Stock will have vested within 60 days of February 26, 2014.

(7) Actinium Holdings Ltd., a Bermuda corporation ("AHL"), has entered the Share Exchange and a related Lock-up Agreement and is the record holder of the number of shares of Common Stock of the Company listed opposite its name. Michael Sheffrey has sole voting and investment power over the securities beneficially owned by Actinium Holdings Ltd. AHL is wholly owned by AHLB Holdings, LLC ("AHLB"), which in turn, is wholly owned by MSKCC. AHL, AHLB and MSKCC may be deemed to share investment and voting power and beneficial ownership of such shares. Investment power with respect to such shares is limited by AHL's agreement not to transfer its shares of Common Stock, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until, in general, the earlier of (i) December 28, 2013 (the first anniversary of the closing of the Share Exchange); or (ii) six (6) months following the effective date of the Registration Statement of which this prospectus is a part. AHL is entitled to certain demand and "piggyback" registration rights with respect to its shares of Common Stock. The shares to be registered by AHL will, however, in certain circumstances, be subject to "cutback" (or reduction of the number of shares includible in an underwritten registration) prior to the "cutback" of the shares being registered on behalf of investors in certain recent private placements of the Company.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Transactions with Related Persons

On January 18, 2001, Actinium Corporation entered into a Clinical Trial Agreement with MSKCC and Sloan-Kettering Institute of Cancer Research (SKI), an entity related to MSKCC. Through an indirect subsidiary, Actinium Holdings Ltd. (AHL), MSKCC has been a principal stockholder of the Company since April 2010. The agreement provided for the conduct by SKI/MSKCC of Phase 1/2 clinical trials of the use of 213Bi-Hu195and cytarabine for the treatment of acute myeloid leukemia and for Actinium Corporation's partial sponsorship of the study in exchange for access to data resulting from the study. Actinium Corporation 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 MSKCC and SKI were paid in full.

On February 11, 2002, Actinium Corporation entered into a License, Development and Commercialization Agreement with SKI (the "License Agreement"). The agreement was amended in August 2006. Pursuant to the agreement, Actinium Corporation licenses certain intellectual property from SKI, including critical patents with respect to Actinium Corporation's core technology, and also supports ongoing research and clinical development of Actinium Corporation 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, Actinium Corporation 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 maintenance fees and research payments.

On February 25, 2006, Actinium Corporation entered into a Clinical Trial Agreement with MSKCC and SKI. 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 Actinium Corporation's partial sponsorship of the study in exchange for access to data resulting from the study. Actinium Corporation 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 the parties intend to attempt to enroll and

additional 3 subjects. The maximum compensation for which Actinium Corporation is responsible for under the agreement is $328,000. This trial has been completed in 2013.

In April 2010, SKI agreed, on behalf of itself and its related or affiliated entities, including MSKCC, to forbear from collecting or otherwise enforcing Actinium Corporation'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 Actinium Corporation'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 Actinium Corporation'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. The total amount forgiven was approximately $360,000.

MSKCC agreed, subject to certain conditions, to utilize donated funds for certain clinical and preclinical programs and activities related to Actinium Corporation's drug development and clinical study programs, including the payment of certain costs and expenses that would otherwise have been borne by Actinium Corporation. During 2012 and 2013, the Company received $0.2 million and $0, respectively.

From July through October 2011, AHL agreed, in connection with Actinium Corporation's Stock offering, to waive its rights to anti-dilution adjustments in respect of its outstanding stock and its preemptive rights to purchase the Company's stock from the Stock Offering. AHL also agreed to the restructuring of its registration rights in favor of the private placement purchasers, the amendment of the stockholders agreement of Actinium Corporation (to permit, among other transactions, the share exchange) and the relinquishment of its rights to Board representation, although one director originally nominated by AHL continued to serve. Actinium agreed (i) not to reduce the indemnification, advancement of expenses and similar rights of present and former directors and officers of Actinium Corporation, (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 liability insurance with such rights applicable to the non-continuing directors following such transactions.

On March 27, 2012, Actinium Corporation entered into an additional clinical trial agreement with Memorial Sloan-Kettering Cancer Center with respect to conducting a Phase 1/2 trial of combination therapy of low dose cytarabine and fractionated dose of Lintuzumab-Ac225. Actinium Corporation will pay $31,185 for each patient that has completed the clinical trial. Upon execution of the agreement, Actinium Corporation was required to pay a start-up fee of $79,623, which was paid on July 10, 2012. The total number of patients anticipated to be enrolled at MSKCC in this trial is 15.

On September 4, 2013, the Company entered into a letter agreement with SKI to set forth the amount that the Company owes SKI for the period from 2011 to 2014 under the License Agreement. The total amount that the Company owes SKI for the period of 2011 to 2014 is $815,100 plus all relevant licensed intellectual property related pass through costs to be determined. The amount owed does not include amounts the Company may owe for patent expenses under the License Agreement (as defined above). As of December 31, 2013, amount owed under this letter agreement for 2014 annual maintenance fee and 2014 research funding was $300,000 plus pass through costs.

AHL has agreed not to transfer its shares of Common Stock, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until, in general, the earlier of (i) December 28, 2013 (the first anniversary of the closing date of the Share Exchange); or (ii) six (6) months following the effective date of the Registration Statement of which this prospectus is a part. AHL will be entitled to certain demand and "piggyback" registration rights with respect to the shares of Common Stock that it may acquire. The shares to be registered by AHL will, however, in certain circumstances, be subject to "cutback" (or reduction of the number of shares includible in an underwritten registration) prior to the "cutback" of the shares being registered on behalf of investors in certain recent private placements.

On January 1, 2012, Actinium Corporation entered into a Consulting Services Agreement with Dr. Rosemary Mazanet, a former director of Cactus. Pursuant to the agreement, Dr. Mazanet provided, among other things, consulting services in the areas of implementation of the Actimab™-A trial including all aspects of study initiation until first patient in at each clinical site. Dr. Mazanet received compensation of $100,000 per year. Since January 1, 2011, Dr. Mazanet has received options to purchase 225,000 shares of common stock of Actinium. Dr. Mazanet resigned as a director of the Company on May 31, 2013.

On August 7, 2012, Actinium Corporation entered into an engagement agreement with Laidlaw & Company (UK) Ltd. (the "Placement Agent") for the 2012 Offering, of which Mr. Seth, a director of the Company, is Head of Healthcare Investment Banking. Pursuant to the agreement, the Placement Agent was engaged as the exclusive agent for the 2012 Offering. None of the Company's current officers or directors had a prior relationship or affiliation with the Company prior to the closing of the Share Exchange. In consideration for its services, the Placement Agent received (a) a cash fee equal to 10% of the gross proceeds raised in the 2012 Offering, (b) a non-accountable expense reimbursement equal to 2% of the gross proceeds raised in the 2012 Offering, and (c) reimbursement of $100,000 for legal expenses incurred by the Placement Agent. The Placement Agent or its designees also received warrants to purchase shares of the Company's Common Stock in an amount equal to 10% of the shares of Common Stock issued as part of the Units sold in the 2012 Offering and the shares of Common Stock issuable upon exercise of the B Warrants included in such Units. The Placement Agent will also receive 5% solicitation fee for any Warrants exercised as a result of being called for redemption by the Company. Upon the final closing of the 2012 Offering the Placement Agent was engaged by the Company to provide certain financial advisory services to the Company for a period of at least 6 months for a monthly fee of $25,000. This financial advisory servises terminated in March 2013. The agreement also provided that (i) if the Company 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, the Company requires a financing or similar advisory transaction the Placement Agent will have the right to act as the Company'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 Company board of directors must be approved by the Placement Agent. The Placement Agent also was engaged by Actinium Corporation as placement agent for its Stock Offering 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 the Company's Common Stock.

On May 9, 2011, Actinium Corporation 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 Company. 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 the Company's current officers or directors had a prior relationship or affiliation with the Company prior to the closing of the Share Exchange. Pursuant to the agreement, the management firm was engaged to provide consulting services to Actinium Corporation related to the consummation of a going public transaction for Actinium. The management firm received a monthly fee of $12,500 which is terminable by the Company 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 the Company 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 transferred until the earlier of twelve months from December 28, 2012, the closing date of the Share Exchange; or for six months after the Registration Statement of which this prospectus is a party 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. The transaction management agreement was terminated on March 31, 2013.

In 2010, Actinium Corporation entered into an agreement with Guagenti & Associates LLC ("G&A"). G&A is affiliated with Enza Guagenti, the former Chief Financial Officer of the Company. Pursuant to the agreement, API leases storage space in Newark, NJ from G&A. The rent is $300 per month. The agreement is on a month-to-month basis and requires a 45-day notice by either party to cancel. Since January 1, 2011, the Company has paid $7,200 pursuant to this agreement. Ms. Guagenti resigned as our Chief Financial Officer on March 9, 2013.

On December 9, 2013, the Company entered into an engagement agreement with Laidlaw & Company (UK) Ltd. (the "Placement Agent") for the December 2013 Offering, of which Mr. Seth, a director of the Company, is Head of Healthcare Investment Banking. Pursuant to the agreement, the Placement Agent was engaged as the exclusive agent for the December 2013 Offering. In consideration for its services, the Placement Agent received (a) a cash fee equal to 10% of the gross proceeds raised in the December 2013 Offering, and (b) a non-accountable expense reimbursement equal to 2% of the gross proceeds raised in the December 2013 Offering,. The Placement Agent or its designees have also received warrants to purchase shares of the Company's Common Stock in an amount equal to 10% of the shares of Common Stock issued as part of the Units sold in the December 2013 Offering and the shares of Common Stock issuable upon exercise of the common stock 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 December 2013 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 December 2013 Offering the Placement Agent has been engaged by the Company to provide certain financial advisory services to the Company for a period of 6 months, unless extended by mutual consent between the Company and the Placement Agent. for a monthly fee of $25,000. The agreement also provides that (i) if the Company 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, the Company requires a financing or similar advisory transaction the Placement Agent will have the right to act as the Company's financial advisor and investment banker in such financing or transaction pursuant to a set fee schedule set forth in the December 9, 2013 engagement 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.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The aggregate fees billed for the fiscal years ended December 31, 2013 and 2012 for professional services rendered by the principal accountant for the audit of its annual financial statements included in Form 10-K (“Audit Fees”), (2) tax compliance, advice, and planning (“Tax Fees”), and (iv) other products or services provided (“Other Fees”):

	Year Ended December 31, 2013	Year Ended December 31, 2012
Audit Fees	$ 109,487	$ 92,445
Tax Fees	-	-
All Other Fees	-	-
Total	$ 109,487	$ 92,445

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

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. (incorporated by reference to Exhibit 2.1 to Form 8-K filed on January 2, 2013).
2.2	Share Exchange Agreement, dated March 11, 2013, by and among Cactus Ventures, Inc., Actinium Pharmaceuticals, Inc, and the shareholders of Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.1 to Form 8-K filed on March 11, 2013).
2.3	Share Exchange Agreement, dated August 22, 2013, by and among Actinium Pharmaceuticals, Inc, Actinium Corporation, and the shareholders of Actinium Corporation (incorporated by reference to Exhibit 2.3 to Form S-1/A filed on August 22, 2013).
3.1	Articles of Incorporation of Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K filed with the SEC on April 17, 2013).
3.2	Fifth Restated Certificate of Incorporation of Actinium Corporation (fka, Actinium Pharmaceuticals, Inc.) (incorporated by reference to Exhibit 3.5 to Form 8-K filed on January 2, 2013).
3.3	Bylaws of Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.2 of the Company's Form filed with the SEC on April 17, 2007).
3.4	Bylaws of Actinium Corporation (fka, Actinium Pharmaceuticals, Inc.) (incorporated by reference to Exhibit 3.7 to Form 8-K filed on January 2, 2013).
3.5	Certificate of Amendment to Articles of Incorporation filed January 7, 2014 (incorporated by reference to Exhibit 3.5 to Form S-1 filed on January 31, 2014).
3.6	Certificate of Amendment to Articles of Incorporation filed February 3, 2014. (incorporated by reference to Exhibit 3.1 to Form 8-K filed on February 7, 2014).
4.1	Form of A Warrant, dated December 19, 2012 (incorporated by reference to Exhibit 4.1 to Form 8-K filed on January 2, 2013).
4.2	Form of B Warrant, dated December 19, 2012 (incorporated by reference to Exhibit 4.2 to Form 8-K filed on January 2, 2013).
4.3	Form of Lock Up Agreement, dated December ____, 2012 (incorporated by reference to Exhibit 4.3 to Form 8-K filed on January 2, 2013).
4.4	Lock-up Agreement, dated August 22, 2013 (incorporated by reference to Exhibit 4.7 to Form S-1/A filed on August 22, 2013).
4.5	Form of Common Stock Warrant, dated December 27, 2013 and January 10, 2014 (incorporated by reference to Exhibit 4.8 to Form S-1 filed on January 31, 2013).
4.6	Form of Lock-Up Agreement, dated December 27, 2013 (incorporated by reference to Exhibit 4.9 to Form S-1 filed on January 31, 2014).
10.1	Registration Rights Agreement, by and among Actinium Pharmaceuticals, Inc., General Atlantic Investments Limited, and Certain Stockholders, dated June 30, 2000 (incorporated by reference to Exhibit 10.1 to Form 8-K filed on January 2, 2013).
10.2	Amendment No. 1 to June 30, 2000 Registration Rights Agreement, dated September 29, 2011 (incorporated by reference to Exhibit 10.2 to Form 8-K/A filed on January 4, 2013).
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(incorporated by reference to Exhibit 10.3 to Form 8-K/A filed on January 4, 2013).
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 (incorporated

	by reference to Exhibit 3.5 to Form 8-K filed on January 4, 2013).
10.5	Intentionally left blank.
10.6	Form of Subscription Agreement, dated December 19, 2012 (incorporated by reference to Exhibit 10.6 to Form 8-K filed on January 2, 2013).
10.7	Form of Unit Purchase Agreement, dated December 19, 2012 (incorporated by reference to Exhibit 10.7 to Form 8-K filed on January 2, 2013).
10.8	Employment Agreement, dated January 2, 2006, between Actinium Pharmaceuticals, Inc. and Dragan Cicic (incorporated by reference to Exhibit 10.8 to Form 8-K/A filed on January 4, 2013).
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 (incorporated by reference to Exhibit 10.9 to Form 8-K/A filed on January 4, 2013).

10.10	Phase 1/2 Study on the safety and efficiency of 225ACAc-HuM195 in patients with advanced Myeloid malignancies with Millennix Oncology, Averion Project, dated December 6, 2006 (incorporated by reference to Exhibit 3.5 to Form 8-K filed on January 4, 2013).
10.11	Product Development and Patent License Agreement, dated February 27, 2003, by and between Abbott Biotherapeutics and Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.11 to Form 8-K/A filed on January 4, 2013).
10.12	Clinical Trial Agreement, dated July 19, 2012, by and between Fred Hutchinson Cancer Center and Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.12 to Form 8-K/A filed on January 4, 2013).
10.13	Employment Letter between Jack V. Talley and Actinium Pharmaceuticals, Inc., effective August 15, 2012 (incorporated by reference to Exhibit 3.5 to Form 8-K filed on January 4, 2013).
10.14	Employment Letter between Enza Guagenti and Actinium Pharmaceuticals, Inc., effective August 15, 2012 (incorporated by reference to Exhibit 10.14 to Form 8-K/A filed on January 4, 2013).
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 1/2 trial of 213Bi-M195 and cytarabine for Acute Myeloid Leukemia.” (incorporated by reference to Exhibit 10.15 to Form 8-K/A filed on January 4, 2013).
10.16	Clinical Trial Agreement with The Trustees of the University of Pennsylvania, dated November 8, 2012 (incorporated by reference to Exhibit 10.16 to Form 8-K/A filed on January 4, 2013).
10.17	Clinical Trial Agreement, dated March 27, 2012, with Memorial Sloan-Kettering Cancer Center (incorporated by reference to Exhibit 10.17 to Form 8-K/A filed on January 4, 2013).
10.18	Clinical Trial Agreement, dated September 22, 2012, with Johns Hopkins University, dated September 24, 2012 (incorporated by reference to Exhibit 10.18 to Form 8-K/A filed on January 4, 2013).
10.19	License Agreement, dated June 14, 2012, for BC8 antibody with Fred Hutchinson Cancer Research Center (incorporated by reference to Exhibit 10.19 to Form 8-K/A filed on January 4, 2013).
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 (incorporated by reference to Exhibit 10.20 to Form 8-K/A filed on January 4, 2013).
10.21	Project Agreement, dated September 30, 2011, between Actinium Pharmaceuticals, Inc. and Aptiv Solutions, Inc. (incorporated by reference to Exhibit 10.21 to Form 8-K/A filed on January 4, 2013).
10.22	Proposal, dated March 30, 2007, with IsoTherapeutics Group, LLC (incorporated by reference to Exhibit 10.22 to Form 8-K/A filed on January 4, 2013).
10.23	Clinical Trial Agreement with The University of Texas M.D. Anderson Cancer, dated March 1, 2012 (incorporated by reference to Exhibit 10.23 to Form 8-K/A filed on January 4, 2013).
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 (incorporated by reference to Exhibit 10.24 to Form 8-K/A filed on January 4, 2013).
10.25	Letter Agreement, dated June 19, 2011, between Actinium Pharmaceuticals, Inc. and Sloan-Kettering Institute for Cancer Research (incorporated by reference to Exhibit 10.25 to Form 8-K/A filed on January 4, 2013).
10.26	Letter Agreement, dated April 9, 2010, between Actinium Pharmaceuticals, Inc. and Sloan-Kettering Institute for Cancer Research (incorporated by reference to Exhibit 10.26 to Form 8-K/A filed on January 4, 2013).
10.27	Letter Agreement, dated July __, 2010, between Actinium Pharmaceuticals, Inc. and Actinium Holdings Limited (Waiver of Anti-Dilution Rights) (incorporated by reference to Exhibit 10.27 to Form 8-K/A filed on January 4, 2013).
10.28	Clinical Trial Agreement, dated April 12, 2006, with Sloan-Kettering Institute for Cancer Research and Memorial Hospital for Cancer and Allied Diseases (incorporated by reference to Exhibit 10.28 to Form 8-K /A filed on January 4, 2013).

10.29	Letter Agreement, dated __, 2011, between Actinium Pharmaceuticals, Inc. and Actinium Holdings Limited (Waiver of Registration Rights) (incorporated by reference to Exhibit 10.29 to Form 8-K/A filed on January 4, 2013).
10.30	Agreement, dated November 29, 2012, by and between Oak Ridge National Laboratory and Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.30 to Form S-1/A filed on August 22, 2013).
10.31	Transaction Management Agreement, dated May 9, 2011, by and between Jamess Capital Group, LLC (fka, AmerAsia Capital Group LLC) and Actinium Corporation (fka, Actinium Pharmaceuticals Inc.) (incorporated by reference to Exhibit 10.31 to Form S-1 filed on September 30, 2013).
10.32	Employment Agreement, effective September 16, 2013, by and between Actinium Pharmaceuticals, Inc. and Kaushik J. Dave (incorporated by reference to Exhibit 10.32 to Form S-1/A filed on October 28, 2013).
10.33	Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan (incorporated by reference to Exhibit 10.33 to Form S-1 filed on January 31, 2014).
10.34	Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.34 to Form S-1 filed on January 31, 2014).
10.35	Form of Unit Purchase Agreement, dated December 27, 2013 and January 10, 2014 (incorporated by reference to Exhibit 10.35 to Form S-1 filed on January 31, 2014).
10.36	Form of Subscription Agreement, dated December 27, 2013 and January 10, 2014 (incorporated by reference to Exhibit 10.36 to Form S-1 filed on January 31, 2014).
10.37	Form of Registration Rights Agreement, dated December 27, 2013 and January 10, 2014 (incorporated by reference to Exhibit 10.37 to Form S-1 filed on January 31, 2014).
10.38	Letter Agreement, dated September 4, 2013, between Actinium Pharmaceuticals, Inc. and Sloan-Kettering Institute for Cancer Research (incorporated by reference to Exhibit 10.38 to Form S-1 filed on January 31, 2014).
14.1	Code of Ethics (incorporated by reference to Exhibit 14.1 to Form 8-K filed on January 2, 2013).
21.1	List of Subsidiaries (incorporated by reference to Exhibit 21.1 to Form 10-K filed on March 29, 2013).

31.1	Certification of Principal Executive Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial and Accounting Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Principal Executive Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Principal Financial and Accounting Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101.INS	** XBRL Instance Document
101.SCH	** XBRL Taxonomy Schema
101.CAL **	XBRL Taxonomy Calculation Linkbase
101.DEF	** XBRL Taxonomy Definition Linkbase
101.LAB **	XBRL Taxonomy Label Linkbase
101.PRE	** XBRL Taxonomy Presentation Linkbase

*In accordance with SEC Release 33-8238, Exhibit 32.1 is being furnished and not filed.
** Furnished herewith. XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following person on behalf of the Registrant.

Dated: February 28, 2014 ACTINIUM PHARMACEUTICALS, INC.

By: /s/ Kaushik J. Dave
Kaushik J. Dave
President,Chief Executive Officer and Interim Chief Financial Officer
(Duly Authorized Officer,Principal Executive Officer and Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following person on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kaushik J. Dave Kaushik J. Dave	President, Chief Executive Officer, Interim Chief Financial Officer and Director (Principal Executive Officer and Principal Financial and Accounting Officer)	February 28, 2014
/s/ Sandesh Seth Sandesh Seth	Director (Chairman of the Board)	February 28, 2014
/s/ David Nicholson David Nicholson	Director	February 28, 2014
/s/ Richard I. Steinhart	Director	February 28, 2014
/s/ Sergio Traversa Sergio Traversa	Director	February 28, 2014