PRUDENTIAL FINANCIAL INC
Form 4
February 02, 2007

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
STRANGFELD JOHN R JR

(Last) (First) (Middle)

C/O PRUDENTIAL FINANCIAL, INC., 751 BROAD STREET, 4TH FLOOR

(Street)

NEWARK, NJ 071023777

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
PRUDENTIAL FINANCIAL INC [(PRU)]

3. Date of Earliest Transaction (Month/Day/Year)
02/01/2007

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
Vice Chairman

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/01/2007		M		22,719	A	$ 32	55,192	D	
Common Stock	02/01/2007		S(1)		1,419	D	$ 89.15	53,773	D	
Common Stock	02/01/2007		S		1,400	D	$ 89.2	52,373	D	
Common Stock	02/01/2007		S		500	D	$ 89.13	51,873	D	
	02/01/2007		S		1,000	D		50,873	D	

Common Stock					$ 89.17			
Common Stock	02/01/2007	S	500	D	$ 89.18	50,373	D	
Common Stock	02/01/2007	S	1,000	D	$ 89.14	49,373	D	
Common Stock	02/01/2007	S	700	D	$ 89.21	48,673	D	
Common Stock	02/01/2007	S	1,000	D	$ 89.23	47,673	D	
Common Stock	02/01/2007	S	1,000	D	$ 89.25	46,673	D	
Common Stock	02/01/2007	S	6,100	D	$ 89.3	40,573	D	
Common Stock	02/01/2007	S	2,500	D	$ 89.35	38,073	D	
Common Stock	02/01/2007	S	2,300	D	$ 89.28	35,773	D	
Common Stock	02/01/2007	S	1,000	D	$ 89.33	34,773	D	
Common Stock	02/01/2007	S	800	D	$ 89.29	33,973	D	
Common Stock	02/01/2007	S	1,500	D	$ 89.32	32,473 (2)	D	
Common Stock						771 (3)	I	By 401(k)
Common Stock						539 (4)	I	By Spouse

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(*e.g.*, puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4,	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)

			and 5)							
			Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Employee Stock Option (right to buy)	$ 32	02/01/2007	M			22,719	(5)	12/18/2012	Common Stock	22,719

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
STRANGFELD JOHN R JR C/O PRUDENTIAL FINANCIAL, INC. 751 BROAD STREET, 4TH FLOOR NEWARK, NJ 071023777			Vice Chairman	

Signatures

By: /s/ Kathleen M. Gibson, Attorney-in-fact	02/02/2007
**Signature of Reporting Person	Date

Explanation of Responses:

***** If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

****** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) The sales reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on September 5, 2006.

(2) Following the transactions reported on this Form 4, the reporting person continues to hold 32,473 shares directly and 771 shares indirectly through the 401(k). The reporting person also holds an additional 21,029 shares in the deferred compensation plan, 266,550 vested stock options, 172,249 unvested stock options and 92,816 target performance shares (the exact number of performance shares awarded being dependent on achievement of performance goals).

(3) Beneficial ownership includes shares acquired under The Prudential Employee Savings Plan which are exempt transactions pursuant to Rules 16b-3(c) and 16a-3(f)(1)(i)(B).

(4) The reporting person disclaims beneficial ownership of these securities, and this report shall not be deemed an admission the reporting person is the beneficial owner of such securities for the purposes of Section 16 or for any other purpose.

(5) The option vests in three equal annual installments beginning on December 18, 2003.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.
Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. style="DISPLAY: block; TEXT-INDENT: 0pt">

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our common stock. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our common stock, including the information discussed under “Risk Factors” in this prospectus and the documents incorporated by reference and our financial statements and notes thereto that are incorporated by reference in this prospectus. As used in this prospectus, unless the context otherwise indicates, the terms “we,” “our,” “us,” or “the Company” refer to Actinium Pharmaceuticals, Inc., a Delaware corporation, and its subsidiaries taken as a whole.

The Company

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. We are currently designing a trial which we intend to submit for registration approval in HSCT in the settings of refractory and relapsed acute myeloid leukemia in older patients. We are developing our cancer drugs using our 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 us. 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. We intend 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.

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.

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Explanation of Responses:

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:

Indications	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:

Indications	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).

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Explanation of Responses:

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).

For the twelve months ended December 31, 2013, we had no revenue and our net loss was approximately $10.8 million. For the twelve months ended December 31, 2012, we had no revenue and our net loss was approximately $8.4 million.

Corporate and Other Information

We were organized in the State of Nevada on October 6, 1997 and reorganized in the State of Delaware on March 20, 2013. Our principal executive offices are located at 501 5 th Avenue, 3 rd Floor, New York, New York 10017. Our telephone number is (646) 459-4201. Our website address is www.actiniumpharmaceuticals.com. Information accessed through our website is not incorporated into this prospectus and is not a part of this prospectus.

THE OFFERING

Common stock offered by us pursuant to this prospectus	Shares of our common stock having an aggregate offering price of up to $75,000,000.
Manner of offering	“At the market offering” that may be made from time to time on a U.S national securities exchange or other market for our common stock in the U.S. through our agent, MLV. See the section entitled “Plan of Distribution” below.
Use of proceeds	We currently intend to use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, including capital expenditures, the advancement of our drug candidates in clinical trials, such as Iomab™-B and Actimab™-A, preclinical trials, and to meet working capital needs. See the section entitled “Use of Proceeds” below.
Risk factors	See “Risk Factors” beginning on page 8 and the other information included in, or incorporated by reference into, this prospectus for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock.
NYSE MKT symbol	ATNM. On March 26, 2014 our common stock commensed trading on the NYSE MKT exchange.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks and uncertainties described below, together with the information under the heading “Risk Factors” in our most recent Annual Report on Form 10-K for the fiscal year ended June 30, 2013, all of which are incorporated herein by reference, as updated or superseded by the risks and uncertainties described under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus, together with all of the other information contained or incorporated by reference in this prospectus. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled “Special Note Regarding Forward-Looking Statements.”

Additional Risks Relating to this Offering

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. We intend to use the net proceeds of this offering to support the worldwide commercialization of MGuard in acute myocardial infarction, develop our pipeline of new products and for general corporate purposes. However, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates.

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

Because the prices per share at which shares of our common stock are sold in this offering may be substantially higher than the book value per share of our common stock, you may suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. The shares sold in this offering, if any, will be sold from time to time at various prices. After giving effect to the sale of our common stock in the maximum aggregate offering amount of $75,000,000 at an assumed offering price of $8.50 per share, the last reported sale price of our common stock on the OTCQB on March 12, 2014, and after deducting estimated offering commissions payable by us, our net tangible book value as of December 31, 2013 would have been $71.1 million, or $2.08 per share of common stock. This represents an immediate increase in the net tangible book value of $2.14 per share to our existing stockholders and an immediate and substantial dilution in net tangible book value of $6.42 per share to new investors who purchase our common stock in the offering.

Sales of a substantial number of shares of our common stock, or the perception that such sales may occur, may adversely impact the price of our common stock.

Almost all of our 25,324,978 outstanding shares of common stock as of March 13, 2014, as well as a substantial number of shares of our common stock underlying outstanding options and warrants, are available for sale in the public market, either pursuant to Rule 144 under the Securities Act of 1933, as amended, or an effective registration

statement. Pursuant to this shelf registration statement on Form S-3, we may sell up to $200,000,000 of our equity securities over the next several years. Sales of a substantial number of shares of our common stock, or the perception that such sales may occur, may adversely impact the price of our common stock.

Risks Related to Our Organization and Our Common Stock

Our corporate charter and bylaws and Delaware law contain anti-takeover provisions that could delay or discourage takeover attempts that stockholders may consider favorable.

Our board of directors is authorized to issue shares of preferred stock in one or more series and to fix the voting powers, preferences and other rights and limitations of the preferred stock. Accordingly, we may issue shares of preferred stock with a preference over our common stock with respect to dividends or distributions on liquidation or dissolution, or that may otherwise adversely affect the voting or other rights of the holders of common stock. Issuances of preferred stock, depending upon the rights, preferences and designations of the preferred stock, may have the effect of delaying, deterring or preventing a change of control, even if that change of control might benefit our stockholders.

In addition, we are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally 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 (i) prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; (ii) the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain "forward-looking statements," which include information relating to future events, future financial performance, strategies, expectations, competitive environment and regulation. Words such as "may," "should," "could," "would," "predicts," "potential," "continue," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates," and similar expressions, as well as statements in future tens identify forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results and will probably not be accurate indications of when such performance or results will be achieved. Forward-looking statements are based on information we have when those statements are made or our management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- our history of recurring losses and negative cash flows from operating activities, significant future commitments and the uncertainty regarding the adequacy of our liquidity to pursue our complete business objectives;
- our ability to complete clinical trials as anticipated and obtain and maintain regulatory approvals for our products;
- our ability to adequately protect our intellectual property;
- disputes over ownership of intellectual property;

- our dependence on a single manufacturing facility and our ability to comply with stringent manufacturing quality standards and to increase production as necessary;

- the risk that the data collected from our current and planned clinical trials may not be sufficient to demonstrate that our products are an attractive alternative to other procedures and products;

Explanation of Responses: 15

- intense competition in our industry, with competitors having substantially greater financial, technological, research and development, regulatory and clinical, manufacturing, marketing and sales, distribution and personnel resources than we do;
- entry of new competitors and products and potential technological obsolescence of our products;
- loss of a key customer or supplier;
- adverse economic conditions;
- adverse federal, state and local government regulation, in the United States;
- price increases for supplies and components;
- inability to carry out research, development and commercialization plans; and
- loss or retirement of key executives and research scientists.

You should review carefully the section entitled “Risk Factors” beginning on page 8 of this prospectus for a discussion of these and other risks that relate to our business and investing in our common stock. The forward-looking statements contained or incorporated by reference in this prospectus are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with MLV as a source of financing.

Unless otherwise indicated in the prospectus supplement, we currently intend to use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, including capital expenditures, the advancement of our drug candidates in clinical trials, such as Iomab™-B and Actimab™-A, preclinical trials, and to meet working capital needs.

Investors are cautioned, however, that expenditures may vary substantially from these uses. Investors will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, the amount of competition and other operational factors. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

From time to time, we evaluate these and other factors and we anticipate continuing to make such evaluations to determine if the existing allocation of resources, including the proceeds of this offering, is being optimized. Circumstances that may give rise to a change in the use of proceeds include:

- a change in development plan or strategy;
- the addition of new products or applications;

- technical delays;
- delays or difficulties with our clinical trials;
- negative results from our clinical trials;
- difficulty obtaining U.S. Food and Drug Administration approval;
- failure to achieve sales as anticipated; and
- the availability of other sources of cash including cash flow from operations and new bank debt financing arrangements, if any.

Pending other uses, we intend to invest the proceeds to us in investment-grade, interest-bearing securities such as money market funds, certificates of deposit, or direct or guaranteed obligations of the U.S. government, or hold as cash. We cannot predict whether the proceeds invested will yield a favorable, or any, return.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value of our common stock as of December 31, 2013 was approximately $(1.6 million), or approximately $(0.06) per share of common stock based upon 24,565,447 shares outstanding at that time. "Net tangible book value" is total assets minus the sum of liabilities and intangible assets. "Net tangible book value per share" is net tangible book value divided by the total number of shares outstanding.

After giving effect to the sale of our common stock at $0.001 par value in the aggregate amount of $75,000,000 at an assumed offering price of $8.50 per share, the last reported sale price of our common stock on the OTCQB on March 12, 2014, and after deducting estimated offering expenses payable by us, our net loss tangible book value as of December 31, 2013 would have been $71.1 million, or $2.08 per share of common stock. This represents an immediate increase in net tangible book value of $2.14 per share to our existing stockholders and an immediate dilution in net tangible book value of $6.42 per share to new investors in this offering.

The following table illustrates this calculation on a per share basis as of December 31, 2013:

Public offering price per share of common stock	$	8.50
Net tangible book value per share of common stock	$	(0.06)
Increase in net tangible book value per share of common stock attributable to the offering	$	2.14
Pro forma net tangible book value per share of common stock after giving effect to the offering	$	2.08
Dilution in net tangible book value per share of common stock to new investors in the offering	$	6.42

The foregoing table and calculations are based on the number of shares of our common stock outstanding as of December 31, 2013.

DIVIDENDS

In the past, we have not declared or paid cash dividends on our common stock, and we do not intend to pay any cash dividends on our common stock. Rather, we intend to retain future earnings, if any, to fund the operation and expansion of our business and for general corporate purposes.

PLAN OF DISTRIBUTION

We have entered into an At-the-Market Issuance Sales Agreement, or sales agreement, with MLV to issue and sell up to $75,000,000 worth of our common stock from time to time under this prospectus. MLV will act as agent in the offering, subject to certain limitations, including the number of shares registered under the registration statement to which the offering relates.

The sales, if any, of shares made under the sales agreement will be made by any method that is deemed an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including by means of ordinary brokers' transactions at market prices, in block transactions or as otherwise agreed by MLV and us. We may instruct MLV not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or MLV may suspend the offering of common stock upon notice and subject to other conditions. As an agent, MLV will not engage in any transactions that stabilize the price of our common stock.

Each time we wish to issue and sell common stock under the sales agreement, we will notify MLV of the number of shares to be issued, the dates on which such sales are anticipated to be made, any minimum price below which sales

may not be made and other sales parameters as we deem appropriate. Once we have so instructed MLV, unless MLV declines to accept the terms of the notice, MLV has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of MLV under the sales agreement to sell our common stock are subject to a number of conditions that we must meet.

We will pay MLV commissions for its services in acting as agent in the sale of common stock. MLV will be entitled to a commission of 3% of the gross proceeds from the sale of common stock offered hereby. In addition, we have agreed to reimburse certain expenses of MLV in an amount not to exceed $25,000. We estimate that the total expenses for the offering, excluding compensation payable to MLV under the terms of the sales agreement, will be approximately $0.1 million.

Settlement for sales of common stock will occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and MLV in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of the common stock on our behalf, MLV may, and will with respect to sales effected in an "at the market" offering, be deemed to be an "underwriter" within the meaning of the Securities Act of 1933, as amended, and the compensation of MLV may be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to MLV against certain civil liabilities, including liabilities under the Securities Act of 1933, as amended. We have also agreed to reimburse MLV for certain other specified expenses.

The offering will terminate as permitted under the sales agreement.

MLV and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, MLV will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon by Hiscock & Barclay, LLP, Syracuse, New York. LeClairRyan, A Professional Corporation, New York, New York, is counsel for MLV in connection with this offering.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the fiscal year ended December 31, 2013 have been so incorporated in reliance on the report of GBH CPAs, PC an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. Such reports, proxy statements and other information can be read and copied at the Securities and Exchange Commission's public reference facilities at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the Securities and Exchange Commission at 1-800-732-0330 for further information on the operation of the public reference facilities. In addition, the Securities and Exchange Commission maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. The address of the Securities and Exchange Commission's website is www.sec.gov.

We make available free of charge on or through our website at www.actiniumpharmceuticals.com, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with or otherwise furnish it to the Securities and Exchange Commission.

We have filed with the Securities and Exchange Commission a registration statement under the Securities Act of 1933, as amended, relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the Securities and Exchange Commission at the address listed above, or for free at www.sec.gov. The registration statement and the documents referred to below under “Incorporation of Certain Information By Reference” are also available on our website, www.actiniumpharmaceuticals.com.

We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Securities and Exchange Commission allows us to “incorporate by reference” the information we have filed with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the Securities and Exchange Commission will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) we file with the Securities and Exchange Commission pursuant to Sections l3(a), l3(c), 14 or l5(d) of the Securities Exchange Act of 1934, as amended, subsequent to the date of this prospectus and prior to the termination of the offering:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed with the Securities and Exchange Commission on February 28, 2014;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 3, 2014;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 13, 2014; and;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 7, 2014;
- The description of our common stock, which is contained in our Form 8-K/A, filed with the Securities and Exchange Commission on Janaury 28, 2013.

All filings filed by us pursuant to the Securities Exchange Act of 1934, as amended, after the date of the initial filing of this registration statement and prior to the effectiveness of such registration statement (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) shall also be deemed to be incorporated by reference into the prospectus.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in this prospectus but not

delivered with this prospectus (other than an exhibit to these filings, unless we have specifically incorporated that exhibit by reference in this prospectus). Any such request should be addressed to us at: 501 5 th Avenue, 3rd Floor, New York, New York 10017, Attention: Corey Sohmer, Vice President Finance and Business Development, or made by phone at (646) 459-4201. You may also access the documents incorporated by reference in this prospectus through our website at www.actinium pharmaceuticals.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

$75,000,000

COMMON STOCK
PROSPECTUS

The date of this prospectus is April 18, 2014
