Registration No.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM S-8

REGISTRATION STATEMENT UNDER **THE SECURITIES ACT OF 1933**

ACTINIUM PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE

(State or other Jurisdiction of Incorporation or Organization)

275 Madison Avenue, 7th Floor, New York, NY

74-2963609

(I.R.S Employer

Identification Number)

(Address of Principal Executive Offices)

ACTINIUM PHARMACEUTICALS, INC. AMENDED AND RESTATED 2013 EQUITY INCENTIVE PLAN

(Full Title of the Plan)

Sandesh Seth **Chairman and CEO**

275 Madison Avenue, 7th Floor New York, New York 10016 Phone: (646) 677-3870

(Name, Address and Telephone Number of Agent for Service)

Copy to:

Thomas Slusarczyk, Esq. The Matt Law Firm, PLLC 1701 Genesee Street Utica, New York 13501 (315) 235-2299

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 \Box Non-accelerated filer \Box (Do not check if a smaller reporting company) Accelerated filer \boxtimes Smaller reporting company \Box Emerging Growth Company 🗵

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

10016

(Zip Code)

CALCULATION OF REGISTRATION FEE

		Proposed	
Amount to	Proposed	maximum	
be	maximum	aggregate	Amount of
registered	offering price	offering	registration
(1)	per share (2)	price (2)	fee
5,000,000	\$ 0.43	\$ 2,150,000	\$ 267.68
	be registered (1)	be maximum registered offering price (1) per share (2)	Amount toProposedmaximumbemaximumaggregateregisteredoffering priceoffering(1)per share (2)price (2)

(1) This Registration Statement also covers additional shares of Actinium Pharmaceuticals, Inc. common stock that may be issuable by reason of stock splits, stock dividends, or other adjustment provisions of the Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan, as amended, in accordance with Rule 416 under the Securities Act of 1933, as amended.

(2) Estimated solely for the purpose of calculating the registration fee computed pursuant to Rule 457(c) and (h), upon the basis of the average of the high and low prices of the common stock as quoted on the NYSE American on March 9, 2018.

(3) Represents the number of stock options and shares available for future option grants under the Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan, as amended.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed by Actinium Pharmaceuticals, Inc. (the "Company"), pursuant to General Instruction E to the Form S-8 Registration Statement under the Securities Act of 1933, as amended, in connection with the registration of an additional 5,000,000 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") issuable pursuant to the Company's Amended and Restated 2013 Stock Plan (as amended, the "Plan"). 12,750,000 shares of Common Stock issuable under the Plan have been previously registered pursuant to the Company's Registration Statements on Form S-8 (File No. 333-197283 and File No. 333-216746) filed with the Securities and Exchange Commission on July 7, 2014 and March 16, 2017, respectively. and the information contained therein is incorporated herein by reference.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to participants in accordance with Rule 428(b)(1) under the Securities Act. In accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission") and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act. Such documents and the documents incorporated by reference into this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission are incorporated herein by reference (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Securities Exchange Act of 1934, as amended (the "Exchange Act")):

(a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the Commission on March 16, 2018;

(b) The Registrant's Current Reports on Form 8-K filed with the Commission on January 8, 2018, February 8, 2018, February 15, 2018, February 26. 2018 and March 9, 2018;

(c) All other reports filed by the Registrant pursuant to Section 13(a) or 15(d) of the Exchange Act, subsequent to the end of the fiscal year covered by the form referred to in (a) above; and

(d) The description of our common stock, which is contained in our Form 8-K/A, filed with the Securities and Exchange Commission on January 28, 2013, including any amendment or report filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of the filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein, (or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein), modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Under no circumstances will any information filed under current items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

You may request a copy of these filings, at no cost, by writing or telephoning the Registrant at:

275 Third Avenue 7th Floor New York, NY 10016 Telephone: 646-677-3870 Attn: Investor Relations

You should rely only on the information provided or incorporated by reference in this Registration Statement or any related prospectus. The Registrant has not authorized anyone to provide you with different information. You should not assume that the information in this Registration Statement or any related prospectus is accurate as of any date other than the date on the front of the document.

Item 8. Exhibits.

Exhibit No.	Description
3.1	Certificate 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	Certificate of Amendment to Certificate of Incorporation filed January 7, 2014 (incorporated by reference to Exhibit 3.5 to
	Form S-1 filed on January 31, 2014).
3.3	Certificate of Amendment to Certificate of Incorporation filed February 3, 2014 (incorporated by reference to Exhibit 3.1 to
	Form 8-K filed on February 7, 2014).
3.4	Certificate of Amendment to Certificate of Incorporation filed February 26, 2015 (incorporated by reference to Exhibit 3.1 to
	Form 8-K filed on March 4, 2015).
3.5	Certificate of Amendment to Actinium's Certificate of Incorporation, as amended, filed on February 26, 2018 (incorporated by
	reference to Exhibit 3.1 to Form 8-K filed on February 26, 2018).
3.6	Amended and Restated Bylaws of Actinium Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 to Form 10-Q filed
	<u>on August 12, 2014).</u>
3.7	Amendment to Amended and Restated Bylaws, dated August 6, 2015 (incorporated by reference to Exhibit 3.1 to Form 10-Q
	<u>filed on August 7, 2015).</u>
3.8	Second Amendment to Amended and Restated Bylaws, as amended, dated November 20, 2015 (incorporated by reference to
	Exhibit 3.1 to Form 8-K filed on November 27, 2015).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Form S-8 filed on July 7, 2014).
5.1	Opinion of The Matt Law Firm, PLLC *
23.1	Consent of GBH CPAs, PC *
23.2	Consent of The Matt Law Firm, PLLC (included in Exhibit 5.1) *
24.1	Power of Attorney (included on signature page) *
99.1	Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan (incorporated by reference to Exhibit 10.33 to Form
	<u>S-1 filed on January 31, 2014).</u>
99.2	First Amendment to Amended and Restated 2013 Stock Plan, effective August 6, 2015 (incorporated by reference to Exhibit
00.2	<u>10.1 to Form 10-Q filed on August 7, 2015).</u>
99.3	Second Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 15, 2015 (incorporated by
00.4	reference to Exhibit 10.1 to Form 8-K filed on December 16, 2015).
99.4	Third Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 22, 2015 (incorporated by reference to Exhibit 10.56 to Form 10-K filed on March 11, 2016).
99.5	Fourth Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 13, 2016 (incorporated by
99.5	reference to Exhibit 1.1 to Form 8-K filed on December 14, 2016).
99.6	Fifth Amendment to the 2013 Amended and Restated Stock Plan (incorporated by reference to Exhibit 10.59 to Form 10-K
99.0	filed on March 16, 2017).
99.7	Sixth Amendment to the 2013 Amended and Restated Stock Plan (incorporated by reference to Exhibit 10.56 to Form 10-K
77.1	filed on March 16, 2018).
	<u>Incu on March 10, 2010).</u>

* Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on this 16th day of March, 2018.

Actinium Pharmaceuticals, Inc.

By: /s/ Sandesh Seth

Name: Sandesh Seth Title: Chairman & Chief Executive Officer (Duly Authorized Officer and Principal Executive Officer)

POWER OF ATTORNEY

Each of the undersigned directors and officers of Actinium Pharmaceuticals, Inc., a Delaware corporation, do hereby constitute and appoint Sandesh Seth the undersigned's true and lawful attorney and agent, with full power of substitution and resubstitution in each, to do any and all acts and things in our name and on our behalf in our respective capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or either one of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names in the capacities indicated below, any and all amendments (including post-effective amendments) hereto, and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or either one of them or any substitute, shall do or cause to be done by virtue hereof. This Power of Attorney may be executed in any number of counterparts.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Sandesh Seth Sandesh Seth	Chairman and Chief Executive Officer (Principal Executive Officer)	March 16, 2018
/s/ Steve O'Loughlin Steve O'Loughlin	Principal Financial Officer (Principal Financial and Accounting Officer)	March 16, 2018
/s/ David Nicholson David Nicholson	Director	March 16, 2018
/s/ Ajit Shetty Ajit Shetty	Director	March 16, 2018
/s/ Richard I. Steinhart Richard I. Steinhart	Director	March 16, 2018

INDEX TO EXHIBITS

Exhibit No.	Description
5.1	Opinion of The Matt Law Firm, PLLC *
23.1	Consent of GBH CPAs, PC *
23.2	Consent of The Matt Law Firm, PLLC (included in Exhibit 5.1) *
24.1	Power of Attorney (included on signature page) *
99.1	Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan (incorporated by reference to Exhibit 10.33 to Form
	<u>S-1 filed on January 31, 2014).</u>
99.2	First Amendment to Amended and Restated 2013 Stock Plan, effective August 6, 2015 (incorporated by reference to Exhibit
	<u>10.1 to Form 10-Q filed on August 7, 2015).</u>
99.3	Second Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 15, 2015 (incorporated by
	reference to Exhibit 10.1 to Form 8-K filed on December 16, 2015).
99.4	Third Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 22, 2015 (incorporated by
	reference to Exhibit 10.56 to Form 10-K filed on March 11, 2016).
99.5	Fourth Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 13, 2016 (incorporated by
	reference to Exhibit 1.1 to Form 8-K filed on December 14, 2016).
99.6	Fifth Amendment to the 2013 Amended and Restated Stock Plan, effective as of December 21, 2016 (incorporated by
	reference to Exhibit 10.59 to Form 10-K filed on March 16, 2017).

* Filed herewith



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

> 315.624.7360 Fax: 315.624.7359

March 16, 2018

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

Re: Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan, as Amended

Ladies and Gentlemen:

We have acted as special counsel to Actinium Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 (the "Registration Statement") relating to the registration of the offer and sale of up to 5,000,000 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"), issuable pursuant to the terms and in the manner set forth in the **Actinium Pharmaceuticals, Inc. Amended and Restated 2013 Stock Plan**, as amended to date (the "Plan").

In connection with the opinion expressed herein, we have examined such documents, records and matters of law as we have deemed relevant or necessary for purposes of this opinion.

In rendering this opinion, we have assumed the genuineness of all signatures on all documents examined by us, the due authority of the parties signing such documents, the authenticity of all documents submitted to us as originals, and the conformity to the originals of all documents submitted to us as copies. We have also assumed that the offer and sale of the Shares complies in all respects with the terms, conditions and restrictions set forth in the Registration Statement and the Plan. We have further assumed that, upon the dates of exercise of the options under the Plan, the Company will have reserved sufficient authorized shares of Common Stock for issuance in exchange therefor. As to any facts material to this opinion that we did not independently establish or verify, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others.

Based upon the foregoing and subject to the assumptions, qualifications and limitations set forth herein, it is our opinion that the Shares have been duly authorized and, upon issuance and payment therefor in accordance with the terms of the Plan and the agreements or certificates issued thereunder, will be legally issued, fully paid and nonassessable.

The foregoing opinion is based upon and limited to the General Corporation Law of the State of Delaware as currently in effect, and we express no opinion as to the effect of any other law of the State of Delaware or the laws, statutes, regulations or ordinances of any other jurisdiction.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Very truly yours,

/s/ The Matt Law Firm, PLLC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 16, 2018, relating to the consolidated financial statements of Actinium Pharmaceuticals, Inc. as of December 31, 2017 and 2016 and for each of the three years in the period ended December 31, 2017.

/s/ GBH CPAs, PC

GBH CPAs, PC www.gbhcpas.com Houston, Texas March 16, 2018