Discover Fin Form 4 February 03	nancial Services , 2016								
FORM	4 UNITED	STATES SH				NGE C	OMMISSION	OMB AP OMB Number:	PROVAL 3235-0287
Washington, D.C. 20549Check this box if no longer subject to Section 16.STATEMENT OF CHANGES IN BENEFICIAL OWNER SECURITIESForm 4 or Form 5 obligations may continue. See Instruction 1(b).Statement of the Securities Exchange A Section 17(a) of the Public Utility Holding Company Act of 1940 30(h) of the Investment Company Act of 1940					Act of 1934, 1935 or Section	Expires: Estimated a burden hour response	•		
(Print or Type	Responses)								
1. Name and A NELMS DA	Address of Reporting AVID W	Sy	2. Issuer Name an mbol iscover Financ			0	5. Relationship of I Issuer		
(Last) 2500 LAKI	(First) (E COOK ROAD	(M	Date of Earliest 7 Ionth/Day/Year) 2/01/2016	Fransaction			_X_ Director _X_ Officer (give t below)		Owner r (specify
			4. If Amendment, Date Original Filed(Month/Day/Year)				6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person		
(City)	(State)	(Zip)	Table I - Non-	Derivative S	ecuri	ties Acqu	ired, Disposed of,	or Beneficiall	y Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Dat any (Month/Day/Y	Code	4. Securitie poor Disposed (Instr. 3, 4 a	l of (Ê and 5) (A)))	5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
C			Code V	Amount	or (D)	Price	(Instr. 3 and 4)		
Common Stock	02/01/2016		А	214,065 (1)	А	\$0	2,032,178.02	D	
Common Stock	02/01/2016		F	113,308 (2)	D	\$ 46.05	1,918,870.02	D	
Common Stock							1,002.54	Ι	By ESOP

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

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number.

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)	4. Transactio Code (Instr. 8)	5. orNumber of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	;	Date	Amou Under Secur	rlying	8. Price of Derivative Security (Instr. 5)	9. Nu Deriv Secu Bene Owne Follo Repo Trans (Instr
			Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		

Reporting Owners

Reporting Owner Name / Address				
reporting o the rante trade of	Director	10% Owner	Officer	Other
NELMS DAVID W 2500 LAKE COOK ROAD RIVERWOODS, IL 60015	Х		Chairman & G	CEO
Signatures				
/s/ Christopher Greene as Attorney-in-Fact for David W. 02/03/2016 Nelms				02/03/2016
<u>**</u> 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) Shares earned upon vesting of non-derivative performance stock units, which are exempt from liability under Section 16(b) of the Securities Exchange Act pursuant to Rule 16b-3(d). Performance stock units are convertible into shares of common stock at a ratio of 1:1.
- (2) Number of shares withheld to pay the tax withholding obligation incurred in connection with the vesting of previously granted restricted stock units and performance stock units.

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. committee chair

Audit Committee

Our audit committee, which currently consists of three directors, provides assistance to our board in fulfilling its legal and fiduciary obligations with respect to matters involving the accounting, financial reporting, internal control and compliance functions of the company. Our audit committee employs an independent registered public accounting firm to audit the financial statements of the company and perform other assigned duties. Further, our audit committee provides general oversight with respect to the accounting principles employed in financial reporting and the adequacy of our internal controls. In discharging its responsibilities, our audit committee may rely on the reports, findings and representations of the company's auditors, legal counsel, and responsible officers. Our board has determined that all members of the audit committee are financially literate within the meaning of SEC rules and under the current listing standards of the NYSE MKT. Richard I. Steinhart is the chairman of the audit committee. Our audit committee met four times during the year ended December 31, 2017.

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. Our compensation committee met two times during the year ended December 31, 2017.

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.

Corporate Governance Committee

Our corporate governance committee, which currently consists of three directors, monitors our corporate governance system. Our corporate governance committee met two times during the year ended December 31, 2017.

Nomination of Directors

Board of Director nominations are selected, or recommended for our Board's selection, by a majority of the independent directors. Our independent directors include Jeffrey W. Chell, David Nicholson, Ajit S. Shetty and Richard I. Steinhart. These directors are charged with the responsibility of proposing potential director nominees to the board of directors for consideration. All of our independent directors are independent directors as defined by the rules of the NYSE MKT. Our independent directors use criteria by which they will seek to evaluate candidates to serve on our Board. The evaluation methodology includes items such as experience in the biotechnology sector, experience with public companies, executive managerial experience, operations and commercial experience, fundraising experience and contacts in the investment banking industry, personal and skill set compatibility with current board members, industry reputation, knowledge of our company generally, and independence.

DIRECTOR COMPENSATION

The following table sets forth the compensation of our non-employee directors for the 2017 fiscal year:

Name	Fees Earned or Paid in Cash	Stock Awards	Option Awards (1)	All Other Compensation	Total
David Nicholson (2)	\$59,000	-	73,430	-	\$132,430
Ajit J. Shetty (3)	39,694	-	82,903	-	\$122,597
Richard Steinhart	\$63,000	-	73,430	-	\$136,430
Sergio Traversa (4)	\$58,500	-	73,430	-	\$131,930

At the end of fiscal year 2017, the aggregate number of option awards outstanding for each director was as

- follows: (i) for Dr. Nicholson, 274,900, (ii) for Dr. Shetty, 75,000, (iii) for Mr. Steinhart, 224,950, and (iv) for Mr. Traversa, 172,950.
- (2) Mr. Nicholson was named Lead Director in September 2017 and receives an additional \$10,000 per year for his role as Lead Director.
- (3) Dr. Shetty was appointed a director on March 28, 2017.
- (4) Mr. Traversa resigned from the company on June 6, 2017.

In accordance with SEC rules, the amounts shown reflect the aggregate grant date fair value of option awards granted to Non-Employee Directors during 2017, computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718.

Our non-employee directors are paid an annual fee of \$40,000 and receive annual option grants. Board committee members will receive the following compensation:

BOD Committee	Chairman	Member	
Audit	\$ 20,000	\$6,000	
Compensation	\$ 10,000	\$ 5,000	
Corporate Governance	\$7,500	\$ 3,000	

AUDIT COMMITTEE REPORT

Report of the Audit Committee of the Board of Directors

The Audit Committee provides assistance to the Board of Directors in fulfilling its oversight responsibilities relating to our corporate accounting and reporting practices toward assurance of the quality and integrity of our consolidated financial statements. The purpose of the Audit Committee is to serve as an independent and objective party to monitor our financial reporting process and internal control system; oversee, review and appraise the audit activities of our independent registered public accounting firm and internal auditing function, maintain complete, objective and open communication between the Board of Directors, the independent accountants, financial management and the internal audit function.

Our independent registered public accounting firm reports directly to the Audit Committee and the Audit Committee is solely responsible to appoint or replace our independent registered public accounting firm and to assure its independence and to provide oversight and supervision thereof. The Audit Committee determines compensation of the independent registered public accounting firm and has established a policy for approval of non-audit related engagements awarded to the independent registered public accounting firm with respect to our company as prescribed by the Sarbanes-Oxley Act of 2002; thus payment amounts are limited and non-audit related engagements must be approved in advance by the Audit Committee. The Audit Committee determines the extent of funding that we must provide to the Audit Committee to carry out its duties and has determined that such amounts were sufficient in 2017.

With respect to the fiscal year ended December 31, 2017, in addition to its other work, the Audit Committee:

Reviewed and discussed with management our audited consolidated financial statements as of December 31, 2017 and for the year then ended; and

Discussed with GBH CPAs, PC the matters required to be discussed by Statement on Auditing Standards No. 61, "Communication with Audit Committees," as amended, with respect to its review of the findings of the independent registered public accounting firm during its examination of our financial statements.

The Audit Committee recommended, based on the review and discussion summarized above, that the Board of Directors include the 2017 audited consolidated financial statements in the 2017 Form 10-K for the fiscal year ended December 31, 2017 for filing with the SEC.

Audit Committee of the Board of Directors of Actinium Pharmaceuticals, Inc.

Richard I. Steinhart, Chairman

Jeffrey W. Chell

Ajit S. Shetty

Information About Our Auditors

Our Audit Committee of our Board appointed GBH CPAs, PC as the independent registered public accounting firm to conduct the audit of our consolidated financial statements for the 2017 fiscal year and to report on our consolidated balance sheets, statements of income and other related statements. GBH CPAs, PC served as our independent registered public accounting firm since December 2012. In August 2018, we appointed Marcum LLP as our independent registered public accounting firm due to a merger between GBH CPAs, PC and Marcum LLP. The Audit Committee Charter includes the procedures for pre-approval of all fees charged by our independent registered public accounting firm. Under the procedure, our Audit Committee approves the engagement letter with respect to audit and review services. Other fees are subject to pre-approval by our Audit Committee. The audit and audit-related fees paid to the auditors with respect to the 2017 fiscal year were pre-approved by our Audit Committee.

Fees and Services

The aggregate fees billed for the fiscal years ended December 31, 2017 and 2016, respectively, for professional services rendered by GBH CPAs, PC for the audits of the Company's annual financial statements included in Form 10-K, or Audit Fees, tax compliance, advice, and planning, or Tax Fees, and all other fees:

	Year Ended			ear Ended
	December 31,			ecember 31,
	20	017	20	016
Audit Fees	\$	116,500	\$	123,168
Audit - Related Fees		60,800		23,750
Tax Fees		-		-
All Other Fees		-		-
Total	\$	177,300	\$	146,918

Pre-Approval Policy

In 2015, the Audit Committee adopted policies and procedures for the pre-approval of audit and non-audit services performed by the independent registered public accountants pursuant to which the Audit Committee generally is required to pre-approve the audit and permissible non-audit services performed by the independent registered public accountants in order to ensure that the provision of such services does not impair the registered accountants' independence.

Compensation Committee Report*

Our Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis ("CD&A") included in this proxy statement. Based on that review and discussion, the Compensation Committee has recommended to our Board that the CD&A be included in the proxy statement.

Submitted by:

The Compensation Committee of the Board of Directors

/s/ David Nicholson, Chairman

/s/ Jeffrey W. Chell

/s/ Ajit S. Shetty

The information contained in this Compensation Committee Report shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the SEC, or subject to the liabilities of Section 18 of the *Securities Exchange Act of 1934, as amended (the "Exchange Act"), except to the extent that we specifically request that the information be treated as soliciting material or specifically incorporate it by reference into a document filed under the Securities Act of 1933, as amended, or the Exchange Act.

Compensation Discussion and Analysis

Our Compensation Committee of our Board of Directors has the responsibility to review, determine and approve the compensation for our executive officers. Further, our Compensation Committee oversees our overall compensation strategy, including compensation policies, plans and programs that cover all employees. In 2016, our Stockholders voted on an advisory basis with respect to our compensation program for named executive officers. Of the votes cast

Explanation of Responses:

(excluding abstentions and broker non-votes), 69.0% were cast in support of the program. In light of this, in reviewing the executive compensation program for 2016, our Compensation Committee decided to retain the general overall program design, which ties a significant portion of the executives' pay closely with our performance. In the future, our Compensation Committee will continue to consider the executive compensation program in light of changing circumstances and stockholder feedback.

We currently employ six executive officers, each of whom serves as a "Named Executive Officer" (or NEO) for purposes of SEC reporting: (1) Sandesh Seth, our Chairman and Chief Executive Officer (who we refer to in this Compensation Discussion and Analysis as our CEO); (2) Steve O'Loughlin, our Principal Financial Officer, (3) Mark Berger, our Chief Medical Officer; (4) Nitya Ray, our Executive Vice-President, Head of Product Development, Manufacturing and Supply Chain; (5) Anil Kapur, our Chief Commercial Officer; and (6) Dale Ludwig, our Chief Scientific Officer.

This Compensation Discussion and Analysis sets forth a discussion of the compensation for our NEOs as well as a discussion of our philosophies underlying the compensation for our NEOs and our employees generally.

Objectives of Our Compensation Program

The Compensation Committee's philosophy seeks to align the interests of our stockholders, officers and employees by tying compensation to individual and company performance, both directly in the form of salary or annual cash incentive payments, and indirectly in the form of equity awards. The objectives of our compensation program enhance our ability to:

attract and retain qualified and talented individuals; and

provide reasonable and appropriate incentives and rewards to our team for building long-term value within our company, in each case in a manner comparable to companies similar to ours.

In addition, we strive to be competitive with other similarly situated companies in our industry. The process of developing pharmaceutical products and bringing those products to market is a long-term proposition and outcomes may not be measurable for several years. Therefore, in order to build long-term value for our company and its stockholders, and in order to achieve our business objectives, we believe that we must compensate our officers and employees in a competitive and fair manner that reflects current company activities, but also reflects contributions to building long-term value.

We utilize the services of StreeterWyatt Governance LLC to review compensation programs of peer companies in order to assist the Compensation Committee in determining the compensation levels for our NEOs, as well as for other employees of our company. StreeterWyatt is a recognized independent consulting company and services clients throughout the United States.

The companies that comprise our peer group are selected and reviewed no less frequently than biennially.

Elements of Our Compensation Program and Why We Chose Each

Main Compensation Components

Our company-wide compensation program, including for our NEOs, is broken down into three main components: base salary, performance cash bonuses and potential long-term compensation in the form of stock options or restricted stock awards. We believe these three components constitute the minimum essential elements of a competitive compensation package in our industry.

Salary

Base salary is used to recognize the experience, skills, knowledge and responsibilities required of our NEOs as well as recognizing the competitive nature of the biopharmaceutical industry. This is determined partially by evaluating our peer companies as well as the degree of responsibility and experience levels of our NEOs and their overall contributions to our company. Base salary is one component of the compensation package for NEOs; the other components being cash bonuses, annual equity grants, and company benefit programs. Base salary is determined in advance whereas the other components of compensation are awarded in varying degrees following an assessment of the performance of a NEO. This approach to compensation reflects the philosophy of our Board and its Compensation Committee to emphasize and reward, on an annual basis, performance levels achieved by our NEOs.

Performance Bonus Plan

We have a performance bonus plan under which bonuses are paid to our NEOs based on achievement of company performance goals and objectives established by the Compensation Committee and/or our Board as well as on

Explanation of Responses:

individual performance. The bonus program is discretionary and is intended to: (i) strengthen the connection between individual compensation and our company's achievements; (ii) encourage teamwork among all disciplines within our company; (iii) reinforce our pay-for-performance philosophy by awarding higher bonuses to higher performing employees; and (iv) help ensure that our cash compensation is competitive. Depending on the cash position of the company, the Compensation Committee and our Board have the discretion to not pay cash bonuses in order that we may conserve cash and support ongoing development programs and commercialization efforts. Regardless of our cash position, we consistently grant annual merit-based stock options to continue incentivizing both our senior management and our employees.

Based on their employment agreements, each NEO is assigned a target payout under the performance bonus plan, expressed as a percentage of base salary for the year. Actual payouts under the performance bonus plan are based on the achievement of corporate performance goals and an assessment of individual performance, each of which is separately weighted as a component of such officer's target payout. For the NEOs, the corporate goals receive the highest weighting in order to ensure that the bonus system for our management team is closely tied to our corporate performance. Each employee also has specific individual goals and objectives as well that are tied to the overall corporate goals. For employees, mid-year and end-of-year progress is reviewed with the employees' managers.

Equity Incentive Compensation

We view long-term compensation, currently in the form of stock options and restricted stock generally vesting in annual increments over four years, as a tool to align the interests of our NEOs and employees generally with the creation of stockholder value, to motivate our employees to achieve and exceed corporate and individual objectives and to encourage them to remain employed by the company. While cash compensation is a significant component of employees' overall compensation, the Compensation Committee and our Board (as well as our NEOs) believe that the driving force of any employee working in a small biotechnology company should be strong equity participation. We believe that this not only creates the potential for substantial longer term corporate value but also serves to motivate employees and retain their loyalty and commitment with appropriate personal compensation.

Other Compensation

In addition to the main components of compensation outlined above, we also provide contractual severance and/or change in control benefits to our Chairman and CEO. The change in control benefits for all applicable persons have a "double trigger." A double trigger means that the executive officers will receive the change in control benefits described in the agreements only if there is both (1) a Change in Control of our company (as defined in the agreements) and (2) a termination by us of the applicable person's employment "without cause" or a resignation by the applicable persons for "good reason" (as defined in the agreements) within a specified time period prior to or following the Change in Control. We believe this double trigger requirement creates the potential to maximize stockholder value because it prevents an unintended windfall to management, as no benefits are triggered solely in the event of a Change in Control, while providing appropriate incentives to act in furtherance of a change in control that may be in the best interests of the stockholders. We believe these severance or change in control benefits are important elements of our compensation program that assist us in retaining talented individuals at the executive and senior managerial levels and that these arrangements help to promote stability and continuity of our executives and senior management team. Further, we believe that the interests of our stockholders will be best served if the interests of these members of our management are aligned with theirs. We believe that providing change in control benefits lessens or eliminates any potential reluctance of members of our management to pursue potential change in control transactions that may be in the best interests of the stockholders. We also believe that it is important to provide severance benefits to members of our management, to promote stability and focus on the job at hand.

We also provide benefits to the executive officers that are generally available to all regular full-time employees of our company, including our medical and dental insurance, and a 401(k) plan. At this time, we do not provide any perquisites to any of our NEOs. Further, we do not have deferred compensation plans, pension arrangements or post-retirement health coverage for our executive officers or employees. All of our employees not specifically under contract are "at-will" employees, which means that their employment can be terminated at any time for any reason by either us or the employee. Our Chairman and CEO has an employment agreement that provides lump sum compensation in the event of his termination without cause or, under certain circumstances, upon a Change of Control.

Determination of Compensation Amounts

A number of factors impact the determination of compensation amounts for our NEOs, including the individual's role in the company and individual performance, length of service with the company, competition for talent, individual compensation package, assessments of internal pay equity and industry data. Stock price performance has generally not been a factor in determining annual compensation because the price of our common stock is subject to a variety of factors outside of our control.

Industry Survey Data

Explanation of Responses:

In collaboration with StreeterWyatt, we establish and maintain a list of peer companies to best assure ourselves that we are compensating our executives on a fair and reasonable basis, as set forth above under the heading "Objectives of our Compensation Program." We also utilize StreetWyatt-prepared data for below-executive level personnel, which data focuses on similarly-sized bio-tech companies. The availability of peer data is used by the Compensation Committee strictly as a guide in determining compensation levels with regard to salaries, cash bonuses and performance-related annual equity grants to all employees. However, the availability of this data does not imply that the Compensation Committee is under any obligation to exactly follow peer companies in compensation matters.

Determination of Base Salaries

As a guideline for NEO base salary, we perform formal benchmarks against respective comparable positions in our established peer group. We adjust salaries based on our assessment of our NEOs' levels of responsibility, experience, overall compensation structure and individual performance. The Compensation Committee is not obliged to raise salaries purely on the availability of data. Merit-based increases to salaries of executive officers are based on our assessment of individual performance and the relationship to applicable salary ranges. Cost of living adjustments may also be a part of that assessment.

Performance Bonus Plan

Concurrently with the beginning of each calendar year, preliminary corporate goals that reflect our business priorities for the coming year are prepared by the CEO with input from the other executive officers. These goals are weighted by relative importance. The draft goals and proposed weightings are presented to the Compensation Committee and the Board and discussed, revised as necessary, and then approved by our Board. The Compensation Committee then reviews the final goals and their weightings to determine and confirm their appropriateness for use as performance measurements for purposes of the bonus program. The goals and/or weightings may be re-visited during the year and potentially restated in the event of significant changes in corporate strategy or the occurrence of significant corporate events. Following the agreement of our Board on the corporate objectives, the goals are then shared with all employees in a formal meeting(s), and are reviewed periodically throughout the year.

Determination of Equity Incentive Compensation

To assist us in assessing the reasonableness of our equity grant amounts, we have reviewed StreeterWyatt supplied information. Such information included equity data from a cross-section of similar companies in our industry.

Equity Grant Practices

All stock options and/or restricted stock granted to the NEOs and other executives are approved by the Compensation Committee. Exercise prices for options are set at the closing price of our common stock on the date of grant. Grants are generally made: (i) on the employee's start date and (ii) at our Board meetings held each February and following annual performance reviews. However, grants have been made at other times during the year. The size of year-end grants for each NEO is assessed against our internal equity guidelines. Current market conditions for grants for comparable positions and internal equity may also be assessed. Also, grants may be made in connection with promotions or job-related changes in responsibilities. In addition, on occasion, the Compensation Committee may make additional special awards for extraordinary individual or company performance.

Compensation Setting Process

At the February meetings of our Board and the Compensation Committee, overall corporate performance and relative achievement of the corporate goals for the prior year are assessed. The relative achievement of each goal is assessed and quantified and the summation of the individual components results in a corporate goal rating, expressed as

percentages. The Compensation Committee then approves the final disbursement of salary increases, cash bonuses and option or restricted stock grants.

The Compensation Committee looks to the CEO's performance assessments of the other NEOs and his recommendations regarding a performance rating for each, as well as input from the other members of our Board. These recommendations may be adjusted by the Compensation Committee prior to finalization. For the CEO, the Compensation Committee evaluates his performance, taking into consideration input from the other members of our Board, and considers the achievement of overall corporate objectives by both the CEO specifically and the company generally. The CEO is not present during the Compensation Committee's deliberations regarding his compensation.

The Compensation Committee has the authority to directly engage, at our company's expense, any compensation consultants or other advisors (such as StreeterWyatt) that it deems necessary to determine the amount and form of employee, executive and director compensation. In determining the amount and form of employee, executive and director compensation Committee has reviewed and discussed historical salary information as well as salaries for similar positions at comparable companies. However the availability of this data does not imply that the Compensation Committee is under any obligation to exactly follow peer companies' compensation practices.

We paid consultant fees to StreeterWyatt of \$10,000. NEOs may have indirect input in the compensation results for other executive officers by virtue of their participation in the performance review and feedback process for the other executive officers.

DIRECTORS AND EXECUTIVE OFFICERS

Directors And Executive Officers

The names, positions and ages of our directors and executive officers as of October 24, 2018, are as follows:

Name Sandesh Seth	0	Position Chairman and Chief Executive Officer
Mark S. Berger, MD	63	Chief Medical Officer
Nitya Ray, Ph.D.	66	Executive Vice President, Head of Product Development, Manufacturing and Supply Chain
Anil Kapur	48	Chief Commercial Officer
Dale L. Ludwig, Ph. D.	56	Chief Scientific Officer
Steve O'Loughlin	33	Principal Financial Officer (Principal Financial and Accounting Officer)
Jeffrey W. Chell. M.D.	64	Director
David Nicholson, Ph. D.	63	Lead Independent Director
Ajit S. Shetty, Ph.D.	72	Director
Richard I. Steinhart	61	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 our Board and serve at the discretion of our Board.

There are no 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, Chairman and CEO

Mr. Sandesh Seth has been our Chief Executive Officer since June 2017. Mr. Seth has been a Director since March 2012, our Chairman of the Board since October 2013, and served as Executive Chairman from August 2014 to June 2017. Mr. Seth was affiliated with Laidlaw & Co. (UK) Ltd., a healthcare focused, investment banking and wealth management firm where he was Head of Healthcare Investment Banking. Mr. Seth is the Chairman of the Board of Relmada Therapeutics, Inc., a publicly listed, specialty pharmaceuticals company focused on pain therapeutics.

Mr. Seth has 25+ years of experience in investment banking (Cowen & Co.), equity research (Bear Stearns, Commonwealth Associates) and in the pharma industry (Pfizer, Warner-Lambert, SmithKline in strategic planning, business development and R&D project management). Mr. Seth has an MBA in Finance from New York University; an M.S. in the Pharmaceutical Sciences from the University of Oklahoma Health Center and a B.Sc. in Chemistry from Bombay University. He has published several scientific articles and was awarded the University Regents Award for Research Excellence at the University of Oklahoma. Mr. Seth was designated as Regulatory Affairs Certified (R.A.C.) by the Regulatory Affairs Professionals Society which signifies proficiency with U.S. FDA regulations.

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.

Steve O'Loughlin, BS, Principal Financial Officer

Steve O'Loughlin has been our Principal Financial Officer since May 2017. Mr. O'Loughlin joined Actinium in October 2015 as Vice President, Finance and Corporate Development, with almost a decade of life sciences industry experience gained from previous positions in investment banking and publicly traded life sciences companies. Prior to Actinium, from June 2015 to October 2015, Mr. O'Loughlin worked at J. Streicher LLC as an investment banker, from August 2012 to June 2015 Mr. O'Loughlin held the position of Vice President, Corporate Finance and Development and was a corporate officer at Protea Biosciences, Inc., a publicly traded life sciences tools company. Previously, From June 2010 to June 2012, Mr. O'Loughlin held corporate development positions with Caliber I.D., a publicly traded diagnostics company. Mr. O'Loughlin previously worked in investment banking at Jesup & Lamont where he focused on the biotechnology and life sciences industries. Mr. O'Loughlin has a B.S. in Business Administration with a concentration in finance from Ramapo College of New Jersey.

Mark S. Berger, MD, Chief Medical Officer

Dr. Berger has been our Chief Medical Officer since January 2017. From September 2013 to January 2017 Dr. Berger worked for Kadmon Corporation where he was Senior Vice President, Clinical Research. In this role he was responsible for all clinical aspects of new drug development including designing and managing clinical trials in oncology indications (non-small cell lung cancer and glioblastoma) and non-oncology indications (chronic graft versus host disease and polycystic kidney disease). Dr. Berger joined Kadmon after serving as Chief Medical Officer of Deciphera Pharmaceuticals from June 2011 to September 2013. Prior to Deciphera, Dr. Berger was Vice President for Clinical Development at Gemin X Pharmaceuticals where he led the clinical strategy, design and management of clinical trials for two novel oncology agents including obatoclax, a pan Bcl-2 inhibitor. Based on the results of a randomized Phase 2 clinical trial of obatoclax, Gemin X was acquired by Cephalon in March of 2011 for a total consideration of \$525 million including \$225 million in an upfront cash payment.

Before his work with biotechnology companies, Dr. Berger held key positions in two global pharmaceutical companies. Dr. Berger previously served as Group Director, Medicine Development Centre-Oncology for GlaxoSmithKline. In this position Dr. Berger managed the development of Tykerb (lapatinib) in lung and breast cancer where he designed and led two Phase 2 clinical trials before planning and leading a 399 patient pivotal Phase 3 trial that resulted in the FDA approval of Tykerb in breast cancer. In addition, he managed the Lapatinib Expanded Access Program (LEAP) that enrolled over 4000 patients on a global basis. Dr. Berger began his career in drug development at Wyeth Research where he led the planning and execution of the pivotal Phase 2 trial for Mylotarg, which was the first antibody targeted chemotherapy agent and targeted CD33, similar to Actimab-A. He presented the Mylotarg clinical data at the FDA's Oncology Drug Advisory Committee meeting, after which Mylotarg received accelerated FDA approval for patients with relapsed AML.

Dr. Berger has a B.A. in biology from Wesleyan University and received his M.D. from the University of Virginia School of Medicine. He did his Hematology-Oncology fellowship at the University of Pennsylvania where he was an Assistant Professor of Medicine, and also was a Research Fellow at the Ludwig Institute for Cancer Research and the Imperial Cancer Research Fund, both in London. Dr. Berger is board certified in internal medicine, hematology and medical oncology.

Nitya Ray, PhD, Executive Vice-President, Head of Product Development, Manufacturing and Supply Chain

Dr. Nitya Ray has been our Executive Vice-President, Head of Product Development, Manufacturing and Supply Chain since June 2017. Dr. Ray joins the Company from CytoDyn, Inc. where he was Sr. Vice President of Manufacturing and CMC Team Leader. At CytoDyn Dr. Ray developed robust and cost effective manufacturing processes for an antibody therapeutic drug candidate, currently in two Phase 3 clinical studies intended to treat and prevent HIV infection. Dr. Ray led a successful regulatory meetings with the FDA while simultaneously developing strategies for process development, scale-up, validation, commercial manufacturing, and supply chain to support potential commercialization of the CytoDyn's HIV therapeutic drug candidate. Prior to CytoDyn, Dr. Ray spent 15 years at Progenics Pharmaceuticals, Inc., a radiopharmaceutical therapeutic and diagnostic company, most recently as Senior Vice President, Manufacturing. At Progenics, Dr. Ray led the development of scalable manufacturing processes and achieved order-of-magnitude cost reduction through improved productivity and scale. In addition, Dr. Ray built process and product development teams for Progenics' small molecule, biologics, and radiopharmaceuticals that developed innovative processes for various phases of clinical development and commercial manufacturing. Dr. Ray supported in-house cGMP biologics manufacturing for Phase 1–3 clinical development and managed relationships with Contract Development and manufacturing Organizations (CDMO's) on a global basis. Dr. Ray also worked at Hoffman-La Roche with a focus on biopharmaceuticals and Verax Corporation in roles of increasing responsibility. Dr. Ray has a Ph.D. in Biochemical Engineering and an M.S. in Chemical and Biochemical Engineering from Rutgers University and a B.S. in Chemical Engineering from Jadavpur University.

Anil Kapur, Chief Commercial Officer

Mr. Kapur joined Actinium in February 2018 from Bristol-Myers Squibb, where he was the Vice President, Head of Early Assets, Biomarkers & External Innovation within the Worldwide Oncology Commercialization organization and helped advance the company's leading Immuno-Oncology portfolio. Prior to this position, he was the Vice President & Global Head, Oncology Commercial Portfolio & Product Strategy at Baxalta and a member of the Oncology Leadership Team. In this role, Mr. Kapur also led the Joint Strategic Committees responsible for advancing the early Immuno-Oncology partnerships with Symphogen and the allogeneic CAR-T partnership with Precision Bio-Sciences.

Mr. Kapur built a distinguished career spanning 15 years at Johnson & Johnson where in his last role, he served as the Vice President, Commercial Leader for the Hematology Franchise with responsibility for the development and execution of global commercial strategy and launch plans for all Hematology in-market, late-stage development, and early pipeline assets. He is credited with significantly shaping the clinical development plans and successful launch and growth of multiple Oncology blockbuster products including IMBRUVICA®, DARZALEX®, and VELCADE®.

At J&J, he led the IMBRUVICA® Joint Commercial Committee (JCC), established between J&J and Pharmacyclics, and built and led the global team that launched DARZALEX®, the first biologic for Multiple Myeloma. Anil also held leadership roles of increasing complexity and responsibility in US Marketing, US Regional Sales, and within the Asia-Pacific Regional Oncology organization covering 14 markets including Japan, China, Australia and Korea.

Mr. Kapur has an MBA from the Fuqua School of Business at Duke University, a MS in Industrial Engineering from Louisiana Tech University, and a Bachelor of Engineering from the Birla Institute of Technology, India.

Dale L. Ludwig, Ph.D., Chief Scientific Officer

Dr. Ludwig joined Actinium in January 2018. Dr. Ludwig has worked for 20 years in oncology antibody drug discovery and development at Eli Lilly and Company and at ImClone Systems, Inc., until its acquisition by Eli Lilly where he supported the development and successful launch of several biologic oncology drugs including Erbitux®, CyramzaTM, Portrazza®, and LartruvoTM as well as the clinical advancement of 10 additional therapeutic antibodies. Most recently, Dr. Ludwig served Chief Scientific Officer/Vice President of Oncology Discovery Research - Biologics Technology. In this role he was responsible for directing antibody discovery and development for oncology biologics and contributed to key strategic and project advancement efforts. Dr. Ludwig was a member of the Oncology Research Senior Leadership Team and directed the empowered antibody drug discovery programs that included collaborations with Immunogen and Zymeworks.

Prior to the acquisition of Imclone by Eli Lilly and Company, Dr. Ludwig served as Head of Molecular & Cellular Engineering at IMClone Systems Incorporated. In this capacity, Dr. Ludwig served as core team leader for several IND filings and phase 1 advancements for novel antibodies. In addition, he directed and oversaw the full spectrum of drug development including antibody discovery, screening, selection, engineering, optimization, cloning and expression. He was also tasked with establishing meaningful preclinical collaborations with key academic investigators and industry leaders. Post-acquisition he was the research representative to the ImClone-Lilly Transition Team.

Before his work in the biotechnology industry, Dr. Ludwig trained as a postdoctoral associate in the DNA Damage and Repair Group of the Los Alamos National Laboratory and as a postdoctoral fellow in the Department of Molecular Genetics, Biochemistry and Microbiology at the University of Cincinnati College of Medicine. Dr. Ludwig has a B.S. in biology with a concentration in microbiology from James Madison University and received his Ph.D. in Microbiology from East Carolina University. Jeffrey W. Chell, MD, Director

Dr. Chell has been a director of the Company since April 2018. Dr. Chell is also a member of our Audit Committee and Compensation Committee. He has been the Chief Executive Officer Emeritus of the National Marrow Donor Program (NMDP) since 2017 having served as its CEO since 2000. Dr. Chell has led the NMDP through transformational growth as its Be The Match Registry tripled to more than 12 million donors, the number of transplants facilitated has grown five fold to over 6,400 annually, and revenue more than tripled to nearly \$400 million per year. He is also the co-founder and has served as Executive Director of the Center For International Blood & Marrow Transplant Research since 2004, a leading research program in the field contributing over 70 research publications per year in peer-reviewed journals. Dr. Chell also currently serves as chair of CLR Insurance, a captive insurance company domiciled in the Cayman Islands. From 2014 to 2016, Dr. Chell served as co-chair of Bone Marrow Donors Worldwide (BMDW) during its IT transformation project, improving revenues and reducing costs.

Prior to joining the NMDP, he served as President, Allina Medical Clinics, a 450 physician multi-specialty medical group from 1994 to 1999. Prior to that he practiced Internal Medicine in Minneapolis and in the U.S. Air Force Medical Corps.

Dr. Chell received his M.D. from the University of Minnesota and his training in Internal Medicine at the University of Wisconsin, Madison. Dr. Chell is a diplomate of the American Board of Internal Medicine, a member of the American Society of Hematology and a member of the American Society of Blood and Marrow Transplantation.

He has received multiple honors including the 2018 Public Service award of the American Society For Blood and Marrow Transplantation, 2017 Most Admired CEO by the Minneapolis/St. Paul Business Journal, 2010 Healthcare Executive of the Year by the Minneapolis/St, Paul Business Journal, and the 2017 Bone Marrow Foundation Service Award.

That Dr. Chell has over 25 years of leadership and executive experience in healthcare, that he has significant knowledge in the blood and marrow transplantation field and that he has experience conducting business in the health sector, led us to conclude that Dr. Chell should serve as a director.

David Nicholson, PhD, Director

David Nicholson has been a Director of the Company since 2008. Dr. Nicholson is also a member of our Compensation Committee and Corporate Governance Committee. In August 2014, Dr. Nicholson joined Actavis plc and Forest Laboratories, Inc. as Senior Vice President, Actavis Global Brands R&D. From March 2012 to August 2014, Dr. Nicholson was on the Executive Committee of Bayer CropScience 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, Dr. 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.

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.

Ajit S. Shetty, PhD, Director

Dr. Shetty has been a Director of the Company since March, 2017. Dr. Shetty is also a member of our, Audit Committee, Compensation Committee, and Chairman of our Corporate Governance Committee. Dr. Shetty joined Janssen Pharmaceutica, Inc. in 1976 ultimately rising to the position of President in 1986 where he led the establishment of Janssen's business in the U.S. From 1999 to 2008 he was Managing Director of Janssen Pharmaceutica, during this time the Janssen Group of companies' global sales grew from \$1 billion to \$8 billion, and from 2004 until 2012 he was Chairman of the Board of Directors. In Dr. Shetty's most recent role at Johnson & Johnson he was head of Enterprise Supply Chain, where he reported to the CEO and was responsible for the transformation and optimization of Johnson & Johnson's supply chain. Dr. Shetty earned a Ph.D. in Metallurgy and B.A. Natural Sciences from Trinity College, Cambridge University and a Master of Business Administration from Carnegie Mellon University. Dr. Shetty has served as a member of Agile Therapeutics, Inc.'s board of directors since February 2016. In 2007, Dr. Shetty was bestowed the title of Baron by King Albert II of Belgium for his exceptional merits. He is a member of the Board of Trustees of Carnegie Mellon University, serves on the Board of Governors for GS1 (Global Standards) in Belgium and formerly served on the Corporate Advisory Board of the John Hopkins Carey Business School. In 2016, Dr. Shetty was named as Chairperson of the Vlaams Instituut voor Biotechnologie (VIB), a Belgium based life sciences research institute focused on translating scientific results into pharmaceutical, agricultural and industrial applications. In addition, he was elected Manager of the Year in 2004 in Flanders and received a Life-Time Achievement Award in India in 2010. We believe Dr. Shetty's qualifications to sit on our Board include his extensive pharmaceutical experience leading commercial and supply chain operations and his significant education background.

That Dr. Shetty has 37 years of leadership and executive experience in the pharmaceutical industry, that he has significant supply chain knowledge and that he has experience conducting business in the U.S. and Europe, led us to conclude that Dr. Shetty should serve as a director.

Richard I. Steinhart, MBA, Director

Mr. Steinhart has served as our Director and Chairman of the Audit Committee since November 2013. Mr. Steinhart is also a member of our Corporate Governance Committee. Since October 2017 Mr. Steinhart has been the Chief Financial Officer of BioXcel Therapeutics, Inc. Since March 2014, Mr. Steinhart has been a Member of the Board of Directors of Atossa Genetics, Inc. where he is Chairman of the Audit Committee and a member of the Compensation Committee. Form October 2015 to April 2017, Mr. Steinhart was Vice President and CFO at Remedy Pharmaceuticals, a privately-held, clinical stage pharmaceutical company. From January 2014 through September 2015 Mr. Steinhart had been a financial and strategic consultant to the biotechnology and medical device industries. From April 2006 through December 2013, Mr. Steinhart was employed by MELA Sciences, Inc., as their Vice President, Finance and Chief Financial Officer, Treasurer and Secretary. In April 2012, Mr. Steinhart received a promotion to Sr. Vice President, Finance and Chief Financial Officer. From May 1992 until joining MELA Sciences, Mr. Steinhart was a Managing Director of Forest Street Capital/SAE Ventures, a boutique investment banking,

Explanation of Responses:

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. Mr. Steinhart began his career at Price Waterhouse, now known as PricewaterhouseCoopers. He holds BBA and MBA degrees from Pace University and is a Certified Public Accountant (inactive).

That Mr. Steinhart brings nearly 30 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.

EXECUTIVE COMPENSATION

The following discussion provides compensation information pursuant to SEC rules and may contain statements regarding future individual and Company performance targets and goals. These targets and goals are disclosed in the limited context of the Company's compensation programs and should not be understood to be statements of management's expectations or estimates of results or other guidance. We specifically caution stockholders not to apply these statements to other contexts.

Chief Executive Officer's Compensation

In August 2018, we amended and restated Mr. Seth's, our Chief Executive Officer, August 6, 2015 Executive Chairman Agreement (the "Prior Agreement"), as amended. This new agreement (the "Agreement") sets forth the terms related to his position as Chief Executive Officer and Chairman of the Board of the Company while retaining and adapting material provisions of the Prior Agreement to that of his role of Chief Executive Officer. Mr. Seth is currently paid an annual salary of \$545,000. The Board reviews the amount of his base salary and performance bonus, and determines the appropriate adjustments to each component of his compensation each calendar year, and he may be entitled to a cash bonus in an amount to be determined by the board with a target of 50% of the base salary.

The Chairman and CEO shall also be awarded stock option and/or restricted stock grants at our Board's discretion. Mr. Seth's agreement includes severance benefits, including in the event of a change of control of the Company, and to provide for immediate vesting of options in accordance with our Amended and Restated 2013 Stock Plan. The term of the agreement is until February 21, 2021.

If the Company terminates the consulting arrangement other than for cause or if Mr. Seth resigns for good reason, Mr. Seth shall be entitled to the following:

(i) a single lump sum payment equal to twenty-four (24) months of Mr. Seth's compensation (at the rate in effect as of the date of termination);

- (ii) continued health benefits for the 24-month period beginning on the date of termination; and
- (iii) All outstanding equity awards granted to Mr. Seth under the Company's equity compensation plans shall become immediately vested and exercisable (as applicable) as of the date of such termination and the performance goals

with respect to such outstanding performance awards, if any, will deemed satisfied at "target".

If the Company terminates Mr. Seth's consulting arrangement other than for cause or if Mr. Seth resigns for good reason, in any case during the 12-month period beginning on the date of a change in control, Mr. Seth shall be entitled to the following:

(i) a single lump sum payment equal to thirty (30) months of Mr. Seth's compensation (at the rate in effect as of the date of termination);

(ii) continued health benefits for the 30-month period beginning on the date of termination; and

All outstanding equity awards granted to Mr. Seth under the Company's equity compensation plans shall become (iii) immediately vested and exercisable (as applicable) as of the date of such termination and the performance goals with respect to such outstanding performance awards, if any, will deemed satisfied at "target".

Mr. Seth is eligible to receive all standard benefits that Company employees are eligible to receive, including 20 vacation days and 5 sick days each year. The Company will provide Mr. Seth with standard business reimbursements (including mileage, supplies, long distance calls), subject to Company policies and procedures and with appropriate receipts. In addition, he will receive any other statutory benefits required by law.

The Company also entered in a standard Company indemnification agreement with Mr. Seth where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Principal Financial Officer Compensation

In August 2018, we amended and restated Mr. O'Loughlin's, our Principal Financial Officer, September 17, 2015 Employment Agreement (the "Prior Agreement"), as amended. This new agreement (the "Employment Agreement") sets forth the terms related to his position as Principal Financial Officer of the Company while retaining and adapting material provisions of the Prior Agreement to that of his role of Principal Financial Officer.

Mr. O'Loughlin's employment with the Company is on an "at will" basis, meaning that either Mr. O'Loughlin or the Company may terminate his employment at any time for any reason or no reason, without further obligation or liability, except as provided in his Employment Agreement. Pursuant to the Employment Agreement, Mr. O'Loughlin is entitled to the following compensation and benefits:

Salary and Bonus

The Board shall review the amount of his base salary and performance bonus, and shall determine the appropriate adjustments to each component of his compensation each calendar year. Mr. O'Loughlin's is entitled to participate in an executive bonus program pursuant to which the Board may award him bonuses, based upon the 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, he shall be entitled to a cash bonus in an amount to be determined by the board with a target of 30% of the base salary. Mr. O'Loughlin's current annual base salary is \$285,000.

Options

From time to time the Board may grant him options or restricted stock to purchase common shares of the Company.

Non-Solicitation

Mr. O'Loughlin agreed that during the term of his employment with the Company, and for a period of 24 months following the cessation of employment with the Company for any reason or no reason, he shall not directly or indirectly solicit, induce, recruit or encourage any of our employees or consultants to terminate their relationship with us, or attempt any of the foregoing. For a period of 24 months following cessation of employment with us for any reason or no reason, he shall not attempt to negatively influence any of our clients or customers from purchasing our products or services.

Benefits

Mr. O'Loughlin is eligible to receive all standard benefits that Company employees are eligible to receive, including 20 vacation days and 5 sick days each year.

Explanation of Responses:

Indemnification

The Company also entered in a standard Company indemnification agreement with Mr. OLoughlin, where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Chief Medical Officer Compensation

In December 2016, the Company and Dr. Mark S. Berger entered into an agreement (the "Berger Employment Agreement"), to employ Dr. Berger as our Chief Medical Officer. Dr. Berger's employment with the Company is on an "at will" basis, meaning that either Dr,. Berger or the Company may terminate his employment at any time for any reason or no reason, without further obligation or liability, except as provided in his Employment Agreement.

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

Dr. Berger's current annual base salary is \$400,000 per year. Dr. Berger may be entitled to a cash bonus in an amount to be determined by the Board with a target of 30% of the base salary.

From time to time the Board may grant him options or restricted stock to purchase common shares of the Company.

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

Non-Competition. During the term and for a period of two years thereafter, Dr. Berger shall not, either directly or indirectly, engage (as principal, partner, employee, consultant, owner, independent contractor, advisor or otherwise, with or without compensation) in any business that directly or indirectly is developing, or plans to develop, radioimmunotherapies for cancer or any therapy related to bone marrow transplant (the "Competing Business"). Notwithstanding the foregoing, this does not prevent Dr. Berger from being engaged or employed with business that has a Competing Business as part of its business, so long as he is not engaged or involved in any way in the Competing Business at such business or enterprise.

Non-Solicitation. 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 shall not directly or indirectly solicit, induce, recruit or encourage any of our employees or consultants to terminate their relationship with us, or attempt any of the foregoing, either for himself or any other person or entity.

The Company also entered in a standard Company indemnification agreement with Dr. Berger where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Executive Vice-President, Head of Product Development, Manufacturing and Supply Chain Compensation

In May 2017 the Company and Dr. Nitya Ray entered into an Offer Letter (the "Employment Agreement") pursuant to which Dr. Ray is the Company's Executive Vice President, Head of Product Development, Manufacturing and Supply Chain. Dr. Ray's employment with the Company is on an "at will" basis, meaning that either Dr. Ray or the Company may terminate his employment at any time for any reason or no reason, without further obligation or liability, except as provided in his Employment Agreement.

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

Dr. Ray's current annual base salary is \$330,850 per year, and Dr. Ray may be entitled to a cash bonus in an amount to be determined by the Board with a target of 30% of the base salary.

From time to time the Board may grant him options or restricted stock to purchase common shares of the Company.

Dr. Ray is also eligible to participate in our benefit plans that are generally provided for executive employees.

Non-Competition. During the term and for a period of three years thereafter, Dr. Ray shall not, either directly or indirectly, engage (as principal, partner, employee, consultant, owner, independent contractor, advisor or otherwise, with or without compensation) in any business that directly or indirectly is developing, or plans to develop, radioimmunotherapies for cancer or any therapy related to bone marrow transplant (the "Competing Business"). Notwithstanding the foregoing, this does not prevent Dr. Ray from being engaged or employed with business that has a Competing Business as part of its business, so long as he is not engaged or involved in any way in the Competing

Explanation of Responses:

Business at such business or enterprise.

Non-Solicitation. 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 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.

The Company also entered in a standard Company indemnification agreement with Dr. Ray where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Chief Scientific Officer

The Company and Dr. Dale Ludwig, effective January 2018, entered into an Offer Letter (the "Employment Agreement") pursuant to which Dr. Ludwig is the Company's Chief Scientific Officer. Dr. Ludwig's employment with the Company is on an "at will" basis, meaning that either Dr. Ludwig or the Company may terminate his employment at any time for any reason or no reason, without further obligation or liability, except as provided in his Employment Agreement. Pursuant to the Employment Agreement. Dr. Ludwig is entitled to the following compensation and benefits:

Dr. Ludwig's current annual base salary is \$325,000 per year, and Dr. Ludwig may be entitled to a cash bonus in an amount to be determined by the Board with a target of 30% of the base salary.

The Board granted to Dr. Ludwig an option to purchase 200,000 common shares of the Company at an exercise price equal to the closing price of the Company's common stock on January 8, 2018.

Vesting Schedule. 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. The term of all options granted under this Agreement will be for 10 years from the date of grant, subject to Dr. Ludwig' continuing service with the Company.

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

Non-Competition. During the term and for a period of three (3) years thereafter, he shall not, either directly or indirectly, engage (as principal, partner, employee, consultant, owner, independent contractor, advisor or otherwise, with or without compensation) in any business that directly or indirectly competes with the Company (the "Competing Business"). Notwithstanding the foregoing, this does not prevent Dr. Ludwig from being engaged or employed with a business that has a Competing Business as part of its business, so long as he is not engaged or involved in any way in the Competing Business at such business or enterprise.

Non-Solicitation. 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 Dr. Ludwig 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.

Indemnification. The Company also entered in a standard Company indemnification agreement with Mr. Ludwig where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Chief Commercial Officer

In January 2018 the Company and Anil Kapur entered into an Offer Letter (the "Employment Agreement") pursuant to which Mr. Kapur is the Company's Chief Commercial Officer. Mr. Kapur's employment with the Company is on an "at will" basis, meaning that either Dr. Kapur or the Company may terminate his employment at any time for any reason or no reason, without further obligation or liability, except as provided in his Employment Agreement. Pursuant to the Employment Agreement. Pursuant to the Employment Agreement, Mr. Kapur is entitled to the following compensation and benefits:

Mr. Kapur's current annual base salary is \$325,000 per year, and he may be entitled to a cash bonus in an amount to be determined by the board with a target of 35% of the base salary.

The board granted to Mr. Kapur an option to purchase 475,000 common shares of the Company at an exercise price equal to the closing price of the Company's common stock on February 6, 2018.

Vesting Schedule. 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. The term of all options granted under this Agreement will be for 10 years from the date of grant, subject to Mr. Kapur's continuing service with the Company.

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

Non-Competition. During the term and for a period of three (3) years thereafter, Mr. Kapur shall not, either directly or indirectly, engage (as principal, partner, employee, consultant, owner, independent contractor, advisor or otherwise, with or without compensation) in any business that directly or indirectly is developing, or plans to develop, radioimmunotherapies for cancer or any therapy related to bone marrow transplant (the "Competing Business"). Notwithstanding the foregoing, this does not prevent him from being engaged or employed with a business that has a Competing Business as part of its business, so long as he is not engaged or involved in any way in the Competing Business at such business or enterprise.

Non-Solicitation. The employment agreement also contains a non-solicitation provision that, among other things, provides that during the term of employment and for a period of 24 months following the cessation of employment with the Company he 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.

Indemnification. The Company also entered in a standard Company indemnification agreement with Mr. Kapur where the Company agreed to indemnify him in certain situations for his role as a Company officer.

Summary Compensation Table

The following table provides information regarding the compensation earned during the fiscal years ended December 31, 2017 and 2016 for our named executive officers.

Name/Position Sandesh Seth (2)	Year Salary 2017 \$306,250	Bonus (1)) \$-	Option Awards \$-	All Other Compensation \$ -	Total \$306,250
Kaushik J. Dave, Former CEO (3)	· · · · · · · · · · · · · · · · · · ·		. ,	\$ - \$ 98,593	\$932,708 \$1,179,743
Mark Berger	2017 \$343,750) \$-	\$234,695	\$ -	\$578,445
Dragan Cicic, Former COO (4)	2017 \$389,125 2016 \$280,500		\$73,430 \$71,394	\$ - \$ -	\$507,555 \$391,894
Nitya Ray	2017 \$177,273	\$-	\$198,896	\$ -	\$376,169
Steve O'Loughlir	n 2017 \$235,152 2016 \$192,610		\$97,907 \$71,394	\$ - \$ -	\$383,059 \$274,004

(1) The bonus disclosed in this column relates to performance in the prior year, but was contingent upon board approval, and was paid in the year disclosed.

(2) Mr. Seth was appointed Chief Executive Officer on June 5, 2017. Prior to this, Mr. Seth was Executive Chairman and was paid an annual consulting fee.

(3) Dr. Dave resigned from the company on May 12, 2017. His 2017 salary includes a severance of \$410,000.

(4) Dr. Cicic resigned from the company on May 12, 2017. His 2017 salary includes a severance of \$283,000.

As an "emerging growth company" we are not 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.

Outstanding Equity Awards at Fiscal Year-End Table

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END - 2017

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, 2017.

	Option Awards					Stock Awards			
Name (a)	Options	Number of Securities Underlying Unexercised Options (#) (Unexercisable (c)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) (d)		Option Expiration Date (f)	Number of Shares or Units of Stock That Have Not Vested (#) (g)	Market rValue 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)	Awards: Market or Payout
Sandesh Seth	24,975	-	-	1.50	8/30/2022	-	-	-	-
	24,975	-	-	1.50	12/19/2022	-	-	-	-
	218,400	61,600	-	6.13	9/23/2024	-	-	-	-
	102,000	48,000	-	3.58	2/15/2025	-	-	-	-
	200,000	300,000	-	1.99	4/15/2026	-	-	-	-
	217,000	533,000	-	1.39	3/14/2027	-	-	-	-
Mark Berger	-	325,000	-	1.04	1/17/2027	-	-	-	-
Nitya Ray	-	250,000	-	1.15	6/13/2027	-	-	-	-
Steve O'Loughlin	56,000	44,000	-	1.79	9/28/2025	-	-	-	-
	20,000	30,000	-	1.99	4/15/2026	-	-	-	-

Explanation of Responses:

38,500 61,500 - 1.39 3/14/2027 - - - -

Pension Benefits

At the present time, we do not sponsor a qualified or non-qualified defined benefit. Our Compensation Committee may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interest.

Potential Payments Under Severance/Change in Control Arrangements

The table below sets forth potential payments payable to our Chief Executive Officer in the event of a termination of employment or consulting arrangement, as applicable, under various circumstances. For purposes of calculating the potential payments set forth in the table below, we have assumed that (i) the date of termination was September 28, 2018 and (ii) the stock price was \$0.7415, which was the closing market price of our common stock on September 28, 2018, the last business day of the third quarter.

Name Sandesh Seth	Termination of Employment Other Than for Cause or Resignation for Good Reason (Not in Connection with a Change in Control). (\$)	Termination Following a Change in Control without Cause or Executive Resigns with Good Reason (\$)
Cash Payment	\$ 1,650,000	\$2,062,500
Total Cash and Benefits	\$ 1,650,000	\$2,062,500

The term "change of control" means:

the direct or indirect sale, transfer, conveyance or other disposition (other than by way of merger or consolidation), (i) in one or a series of related transactions, of all or substantially all of the properties or assets of the Company and its subsidiaries, taken as a whole, to any "Person" (as that term is used in Section 13(d)(3) of the Exchange Act) that is not an Affiliate;

(ii) the "Incumbent Directors" (meaning those individuals who, on date the Plan was adopted by the Board (the "Effective Date"), constitute the Board, provided that any individual becoming a Director subsequent to the Effective Date whose election or nomination for election to the Board was approved by a vote of at least two-thirds of the Incumbent Directors then on the Board (either by a specific vote or by approval of the proxy statement of the Company in which such person is named as a nominee for Director without objection to such nomination) shall be

an Incumbent Director, and further provided that no individual initially elected or nominated as a director of the Company as a result of an actual or threatened election contest with respect to Directors or as a result of any other actual or threatened solicitation of proxies by or on behalf of any person other than the Board shall be an Incumbent Director) cease for any reason to constitute at least a majority of the Board;

(iii) the date which is 10 business days prior to the consummation of a complete liquidation or dissolution of the Company;

the acquisition by any Person of "Beneficial Ownership" (within the meaning of Rule 13d-3 and Rule 13d-5 under the Exchange Act, except that in calculating the Beneficial Ownership of any particular Person, such Person shall be deemed to have beneficial ownership of all securities that such Person has the right to acquire by conversion or exercise of other securities, whether such right is currently exercisable or is exercisable only after the passage of time) of 50% or more (on a fully diluted basis) of either (A) the then outstanding shares of Common Stock of the Company, taking into account as outstanding for this purpose such Common Stock issuable upon the exercise of options or warrants, the conversion of convertible stock or debt, and the exercise of any similar right to acquire (iv) such Common Stock (the "Outstanding Company Common Stock") or (B) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this Plan, the following acquisitions shall not constitute a Change of Control: (I) any acquisition by the Company or any Affiliate, (II) any acquisition by any employee benefit plan sponsored or maintained by the Company or any Affiliate, (III) any acquisition which complies with clauses, (A), (B) and (C) of subsection (v) of this definition, or (IV) in respect of an Award held by a particular Participant, any acquisition by the Participant or any group of persons including the Participant (or any entity controlled by the Participant or any group of persons including the Participant (or any entity controlled by the Participant or any group of persons including the

the consummation of a reorganization, merger, consolidation, statutory share exchange or similar form of corporate transaction involving the Company that requires the approval of the Company's shareholders, whether for such transaction or the issuance of securities in the transaction (a "Business Combination"), unless immediately following such Business Combination: (A) more than 50% of the total voting power of (I) the entity resulting from such Business Combination (the "Surviving Company"), or (II) if applicable, the ultimate parent entity that directly or indirectly has beneficial ownership of sufficient voting securities eligible to elect a majority of the members of the board of directors (or the analogous governing body) of the Surviving Company (the "Parent Company"), is represented by the Outstanding Company Voting Securities that were outstanding immediately prior to such Business Combination (or, if applicable, is represented by shares into which the Outstanding Company Voting Securities were converted pursuant to such Business Combination), and such voting power among the holders $(v)_{there in the transformed to the such as the such$ thereof is in substantially the same proportion as the voting power of the Outstanding Company Voting Securities among the holders thereof immediately prior to the Business Combination; (B) no Person (other than any employee benefit plan sponsored or maintained by the Surviving Company or the Parent Company) is or becomes the Beneficial Owner, directly or indirectly, of 50% or more of the total voting power of the outstanding voting securities eligible to elect members of the board of directors of the Parent Company (or the analogous governing body) (or, if there is no Parent Company, the Surviving Company); and (C) at least a majority of the members of the board of directors (or the analogous governing body) of the Parent Company (or, if there is no Parent Company, the Surviving Company) following the consummation of the Business Combination were Board members at the time of the Board's approval of the execution of the initial agreement providing for such Business Combination

The cash component (as opposed to option accelerations) of any change of control payment would be structured as a one-time cash severance payment.

PRINCIPAL STOCKHOLDERS

The following table shows the beneficial ownership of our Common Stock as of October 23, 2018 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 October 23, 2018, 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.

Unless otherwise indicated, the principal address of each of the persons below is c/o Actinium Pharmaceuticals, Inc., 275 Madison Ave, 7th floor, New York, NY 10016.

Executive Officers and Directors	Number of Shares of Common Stock and Preferred Stock Beneficially Owned	1	Percentage of Ownership	
Sandesh Seth	1,611,147	(1)	1.4	%
Steve O'Loughlin	230,500	(2)	*	%
Mark Berger, M.D.	220,500	(3)	*	%
Nitya G. Ray, Ph.D.	137,500	(4)	*	%
Anil Kapur	40,000	(5)	*	%
Dale Ludwig, Ph.D.	-	(6)	*	%
Jeffrey W. Chell, M.D.	7,500	(7)	*	%
David Nicholson, Ph.D.	219,900	(8)	*	%
Ajit S. Shetty, Ph.D.	64,730	(9)	*	%
Richard I. Steinhart	179,447	(10)	*	%
All Directors and Officers as a Group (10 persons) All other 5% holders	2,711,224		2.3	%
Anson Funds Management LP, Anson Management GP LLC, Mr. Bruce R. Winson, Anson Advisors Inc., Mr. Amin Nathoo and Mr. Moez Kassam 5950 Berkshire Lane, Suite 210 Dallas, Texas 75225	6,000,000		5.5	%

*

less than 1%

(a) Based on 114,698,044 shares of Common Stock outstanding as of October 23, 2018

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, 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, and warrants to purchase 57,212 shares of Common Stock at an exercise price of \$2.34 per share. 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. 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

(1) by the family of Mr. Seth whose terms are the same as those issued to Amrosan LLC. On August 30, 2012 and December 12, 2012, Mr. Seth was granted options to purchase an aggregate of 49,950 shares of Common Stock at an exercise price of \$1.50 per share. On September 13, 2014, Mr. Seth was granted an option to purchase 280,000 shares with an exercise price of \$6.13 per share. On February 18, 2015, Mr. Seth was granted an option to purchase 150,000 shares with an exercise price of \$3.58 per share. On April 15, 2016, Mr. Seth was granted an option to purchase 500,000 shares at an exercise price of \$1.99 per share. On March 14, 2017, Mr. Seth was granted options to purchase an aggregate of 750,000 shares of Common Stock at an exercise price of \$1.39 per share. On July 13, 2018, Mr. Seth was granted an option to purchase 1,000,000 shares at an exercise price of \$0.7829 per share. All options are subject to vesting. Within 60 days of October 23, 2018, 1,260,950 options will have vested. Includes 133,333 shares of Common Stock, 13,125 March 2018 Series A Warrants and 39,375 March 2018 Series B Warrants.

On October 1, 2015, Mr. O'Loughlin was granted an option to purchase 100,000 shares with an exercise price of \$1.79 per share. On April 14, 2016, Mr. O'Loughlin was granted an option to purchase 50,000 shares at an exercise price of \$1.99 per share. On March 14, 2017, Mr. O'Loughlin was granted options to purchase an aggregate of

(2) 100,000 shares at an exercise price of \$1.39 per share. On July 13, 2018, Mr. O'Loughlin was granted an option to purchase 265,000 shares at an exercise price of \$0.7829 per share. All options are subject to vesting. Within 60 days of October 23, 2018, 195,000 options will have vested. Includes 25,500 shares of Common Stock, 2,500 March 2018 Series A Warrants and 7,500 March 2018 Series B Warrants.

On January 17, 2017, Dr. Berger was granted an option to purchase 325,000 shares with an exercise price of \$1.04 per share. On July 13, 2018, Dr. Berger was granted an option to purchase 250,000 shares at an exercise price of 2)\$0.7820. All entries are subject to vesting. Within 60 down of October 22, 2018, 187,500 shares will have vested

(3)\$0.7829. All options are subject to vesting. Within 60 days of October 23, 2018, 187,500 shares will have vested. Includes 19,000 shares of Common Stock, 3,500 March 2018 Series A Warrants and 10,500 March 2018 Series B Warrants.

On June 15, 2017, Dr. Ray was granted an option to purchase 250,000 shares with an exercise price of \$1.15 per share. On July 13, 2018, Dr. Ray was granted an option to purchase 75,000 shares with an exercise price of

(4)\$0.7829 per share. All options are subject to vesting. Within 60 days of October 23, 2018, 107,500 shares will have vested. Includes 20,000 shares of Common Stock, 2,500 March 2018 Series A Warrants and 7,500 March 2018 Series B Warrants.

On February 6, 2018, Mr. Kapur was granted an option to purchase 475,000 shares of Common Stock at an (5) exercise price of \$0.64 per share. It is not exercisable with 60 days of October 23, 2018. Includes 40,000 shares of

Common Stock.

- (6) On January 8, 2018, Dr. Ludwig was granted an option to purchase 200,000 shares of Common Stock at an exercise price of \$0.72 per share. It is not exercisable within 60 days of October 23, 2018.
- (7) On April 27, 2018, Dr. Chell was granted an option to purchase 75,000 shares of Common Stock at an exercise price of \$0.347 per share. On July 13, 2018, Dr. Chell was granted an option to purchase 75,000 shares at an

exercise price of \$0.7829 per share. Within 60 days of October 23, 2018, 7,500 shares will have vested. On February 12, 2012, Dr. Nicholson was granted an option to purchase 49,950 shares of Common Stock at an exercise price of \$0.784 per share and on August 12, 2012 and December 19, 2012, Dr. Nicholson was granted options to purchase an aggregate of 49,950 shares at an exercise price of \$1.50 per share. On February 18, 2015, Dr. Nicholson was granted an option to purchase 25,000 shares with an exercise price of \$3.58 per share. On April

(8) 15, 2016, Dr. Nicholson was granted an option to purchase 75,000 shares at an exercise price of \$1.99 per share. On March 14, 2017, Dr. Nicholson was granted an option to purchase 75,000 shares at an exercise price of \$1.39 per share. On July 13, 2018, Dr. Nicholson was granted an option to purchase 75,000 shares at an exercise price of \$0.7829 per share. All options are subject to vesting. Within 60 days of October 23, 2018, 209,900 options will have vested. Includes 10,000 shares of Common Stock.

On March 28, 2017, Dr. Shetty was granted an option to purchase 75,000 shares of Common Stock with an (9) exercise price of \$1.58 per share. On July 13, 2018, Dr. Shetty was granted an option to purchase 75,000 shares at

(9) exercise price of \$1.58 per share. On July 15, 2018, Dr. Shetty was granted an option to purchase 75,000 shares at an exercise price of \$0.7829 per share. Within 60 days of October 23, 2018, 42,000 shares will have vested. Includes 22,730 shares of Common Stock.

On December 16, 2013 Mr. Steinhart was granted an option to purchase 49,950 shares of Common Stock at an exercise price of \$6.70 per share. On February 18, 2015, Mr. Steinhart was granted an option to purchase 25,000 shares at an exercise price of \$3.58 per share. On April 15, 2016, Mr. Steinhart was granted an option to purchase (10)

(10) purchase 75,000 shares at an exercise price of \$1.39 per share. On July 13, 2018, Mr Steinhart was granted an option to purchase 75,000 shares at an exercise price of \$0.7829 per share. All options are subject to vesting. Within 60 days of October 23, 2018, 162,947 options will have vested. Includes 9,500 shares of Common Stock, 1,750 March 2018 Series A Warrants and 5,250 March 2018 Series B Warrants.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The following sets forth a summary of transactions, or any currently proposed transaction, in which the Company was to be a participant and the amount involved exceeded or exceeds \$120,000 and in which any related person had or will have a direct or indirect material interest (other than compensation described under "Executive Compensation"). We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions.

Transactions with Related Persons

On February 11, 2015, the Company completed a public offering of common shares and warrants, representing gross proceeds of approximately \$20.0 million and a net amount of approximately \$18.5 million after deducting the underwriting discount and the other offering expenses. Laidlaw & Company (UK) Ltd., of which Mr. Seth, Chairman and CEO was the former Head of Healthcare Investment Banking, acted as sole book-running manager for the offering. The offering was made pursuant to a shelf registration statement (File No. 333-194768) previously filed with and declared effective by the U.S. Securities and Exchange Commission.

In an agreement dated March 11, 2015 and effective August 11, 2014, Mr. Seth entered into a consulting agreement with the Company to serve as Executive Chairman of the Company. The agreement was amended and restated on August 6, 2015. This agreement was later amended and restated in August 2018, to take in account Mr. Seth's position as Chairman and CEO of the Company. Mr. Seth is also entitled to participate in a Company bonus program, which shall be established by the Board pursuant to which the Board shall award bonuses to the consultant, based upon the achievement of written individual and corporate objectives such as the Board shall determine.

Non-Competition Agreements and Indemnity Agreements

Our executive officers have signed non-competition agreements, which provide that all inventions become the immediate property of our Company 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. Our executive officers and directors have also entered into indemnity agreements with us.

MATTERS TO BE CONSIDERED AT THE ANNUAL MEETING

PROPOSAL 1

ELECTION OF DIRECTORS

Nominee for the Board of Directors

The Company's Certificate of Incorporation (the "Charter") established a classified Board of Directors with three classes of directors. Currently there are four directors divided into three classes designated Class I, Class II, and Class III. The term of office for each Class I director expires at the 2020 Annual Meeting; the term of office for each Class II director expires at the 2018 annual meeting of shareholders; and the term of office for each Class III director expires at the 2019 annual meeting of shareholders. Pursuant to the Charter, the directors due for election at the 2018 Annual meeting are Jeffrey W. Chell and Sandesh Seth (Class II).

The Board of Directors proposes the election of the following individuals to serve on its Board of Directors for a term that continues pursuant to the director terms outlined below or until his successor is duly elected. The nominees are current board members Dr. Chell and Mr. Seth. In the event the nominee is unable or unwilling to serve as a director, the individual named as proxy on the proxy card will vote the shares that he represents for election of such other person or persons as the Board of Directors may recommend. The Board of Directors has no reason to believe that the nominee will be unable or unwilling to serve.

The following is information about the nominee, including biographical data for at least the last five years. Should the nominees become unavailable to accept nomination or election as a director, the individual named as proxy on the enclosed proxy card will vote the shares that he represents for the election of such other person as the Board of Directors may recommend.

The Board of Directors is responsible for supervision of the overall affairs of the company. Following the annual meeting, the Board of Directors will consist of four directors. The term of each director is set forth below or until their successors are duly elected:

Director	Class	Term (from 2018 Annual Meeting, if elected)
David Nicholson	Class I	2 years
Richard I Steinhart	Class I	2 years
Jeffrey W. Chell	Class II	3 years
Sandesh Seth	Class II	3 years
Ajit S. Shetty	Class III	1 years

Directors elected at each annual meeting shall be elected for a 3-year term. The name of the nominee for our Board of Directors and information about him is set forth below. There are no family relationships between any of the executive officers and directors.

Jeffrey W. Chell, MD, Director

Dr. Chell has been a director of the Company since April 2018. Dr. Chell is also a member of our Audit Committee and Compensation Committee. He has been the Chief Executive Officer Emeritus of the National Marrow Donor Program (NMDP) since 2017, having served as its CEO since 2000. Dr. Chell has led the NMDP through transformational growth as its Be The Match Registry tripled to more than 12 million donors, the number of transplants facilitated has grown fivefold to over 6,400 annually, and revenue more than tripled to nearly \$400 million per year. He is also the co-founder and has served as Executive Director of the Center For International Blood & Marrow Transplant Research since 2004, a leading research program in the field, contributing over 70 research

Explanation of Responses:

publications per year in peer-reviewed journals. Dr. Chell also currently serves as chair of CLR Insurance, a captive insurance company domiciled in the Cayman Islands. From 2014 to 2016, Dr. Chell served as co-chair of Bone Marrow Donors Worldwide (BMDW) during its IT transformation project, improving revenues and reducing costs.

Prior to joining the NMDP, he served as President, Allina Medical Clinics, a 450 physician multi-specialty medical group from 1994 to 1999. Prior to that he practiced Internal Medicine in Minneapolis and in the U.S. Air Force Medical Corps.

Dr. Chell received his M.D. from the University of Minnesota and his training in Internal Medicine at the University of Wisconsin, Madison. Dr. Chell is a diplomate of the American Board of Internal Medicine, a member of the American Society of Hematology and a member of the American Society of Blood and Marrow Transplantation.

He has received multiple honors including the 2018 Public Service award of the American Society For Blood and Marrow Transplantation, 2017 Most Admired CEO by the Minneapolis/St. Paul Business Journal, 2010 Healthcare Executive of the Year by the Minneapolis/St, Paul Business Journal, and the 2017 Bone Marrow Foundation Service Award.

That Dr. Chell has over 25 years of leadership and executive experience in healthcare, that he has significant knowledge in the blood and marrow transplantation field and that he has experience conducting business in the health sector, led us to conclude that Dr. Chell should serve as a director.

Sandesh Seth, MS, MBA, Chairman and CEO

Mr. Sandesh Seth has been our Chief Executive Officer since June 2017. Mr. Seth has been a Director since March 2012, our Chairman of the Board since October 2013, and served as Executive Chairman from August 2014 to June 2017. Mr. Seth was affiliated with Laidlaw & Co. (UK) Ltd., a healthcare focused, investment banking and wealth management firm where he was Head of Healthcare Investment Banking. Mr. Seth is the Chairman of the Board of Relmada Therapeutics, Inc., a publicly listed, specialty pharmaceuticals company focused on pain therapeutics.

Mr. Seth has over 25 years of experience in investment banking (Cowen & Co.), equity research (Bear Stearns, Commonwealth Associates) and in the pharma industry (Pfizer, Warner-Lambert, SmithKline in strategic planning, business development and R&D project management). Mr. Seth has an MBA in Finance from New York University; an M.S. in the Pharmaceutical Sciences from the University of Oklahoma Health Center and a B.Sc. in Chemistry from Bombay University. He has published several scientific articles and was awarded the University Regents Award for Research Excellence at the University of Oklahoma. Mr. Seth was designated as Regulatory Affairs Certified (R.A.C.) by the Regulatory Affairs Professionals Society which signifies proficiency with U.S. FDA regulations.

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.

Vote Required

Directors are elected by a plurality of the votes cast in person or by proxy at the annual meeting and entitled to vote on the election of directors. "Plurality" means that the nominees receiving the greatest number of affirmative votes will be elected as directors, up to the number of directors to be chosen at the meeting. Broker non-votes will not affect the outcome of the election of directors because brokers do not have discretion to cast votes on this proposal without instruction from the beneficial owner of the shares.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ELECTION OF THE DIRECTOR NOMINEES

PROPOSAL 2

Explanation of Responses:

RATIFICATION OF THE APPOINTMENT OF MARCUM LLP

The audit committee has appointed Marcum LLP as our independent registered public accounting firm to audit the consolidated financial statements of Actinium Pharmaceuticals, Inc. and its subsidiaries for the fiscal year ending December 31, 2018. Representatives of Marcum LLP will be present at the annual meeting and will have an opportunity to make a statement or to respond to appropriate questions from stockholders. Although stockholder ratification of the appointment of our independent auditor is not required by our Bylaws or otherwise, we are submitting the selection of Marcum LLP to our stockholders for ratification to permit stockholders to participate in this important corporate decision. If not ratified, the audit committee will reconsider the selection, although the audit committee will not be required to select a different independent auditor for our company.

Vote Required

The ratification of the appointment of Marcum LLP as our independent registered public accounting firm will be approved if there is a quorum and the votes cast "FOR" the proposal exceeds those cast against the proposal.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" RATIFICATION OF MARCUM LLP AS THE INDEPENDENT REGISTERED ACCOUNTING FIRM OF ACTINIUM PHARMACEUTICALS, INC.

PROPOSAL 3

APPROVAL OF AMENDMENT OF THE 2013 AMENDED AND RESTATED STOCK PLAN, AS AMENDED, TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK AUTHORIZED FOR ISSUANCE UNDER THE PLAN BY 5 MILLION SHARES FROM 17,750,000 TO 22,750,000 TO SUPPORT PLANNED HIRING EFFORTS AS THE COMPANY GROWS

Description of Proposed Amendment

On September 28, 2018, the Board unanimously approved an amendment (the "Plan Amendment") to the Company's 2013 Amended and Restated Stock Plan, as amended (the "Plan"), subject to stockholder approval, to increase the number of shares of Common Stock authorized for issuance under the Plan by 5 million shares from 17,750,000 to 22,750,000 to support planned hiring efforts as the company grows.

The full text of the proposed Plan Amendment is set out in <u>Annex A</u> to this Proxy Statement. The text of the proposed Plan Amendment is subject to modification to include such changes as the Board deems necessary and advisable to affect the increase in the number of shares of Common Stock reserved and available for issuance under the Plan. Stockholders are being asked to approve the Plan Amendment.

Vote Required and Recommendation

The approval of the Plan Amendment will be made upon the affirmative vote of the majority of shares cast on the proposal. Abstentions and broker non-votes will have no direct effect on the outcome of this proposal. If the proposal is not approved by the stockholders, the Plan Amendment will not be effective and the proposal will not be implemented.

Reasons for the Plan Amendment

Existing Plan

Our Plan is currently comprised of 17,750,000 shares of Common Stock.

The purpose of the Plan is to provide a means through which we may attract and retain key personnel and to provide a means whereby directors, officers, managers, employees, consultants and advisors (and prospective directors, officers, managers, employees, consultants and advisors) can acquire and maintain an equity interest in our Company, or be paid incentive compensation, which may (but need not) be measured by reference to the value of common shares, thereby strengthening their commitment to the welfare of our Company and aligning their interests with those of our stockholders.

Increase in Size of Plan

As of September 30, 2018, outstanding awards (consisting of options to purchase shares of common stock) issued under the Plan totaled 7,667,271 shares of common stock, leaving 9,481,065 shares available for issuance.

Our Board determined to increase the number of shares of common stock reserved and available for issuance under the Plan by 5 million shares because it believes that the current number is insufficient for the purposes of the Plan for future issuances. The market for quality personnel is competitive, and the ability to obtain and retain competent personnel is of great importance to our business operations.

Effects of the Plan Amendment

As a result of the Plan Amendment, there will be an increase in the total number of shares of common stock reserved for issuance under the Plan. This will provide us with the ability to grant more awards than are currently available under the Plan to eligible recipients including employees, directors, consultants and advisors. The issuance in the future of awards under the Plan consisting of full value awards and options to purchase shares of common stock may have the effect of diluting the earnings per share and book value per share, as well as the stock ownership and voting rights, of the holders of the currently outstanding shares of common stock. The effective increase in the number of authorized but unissued shares of common stock which may be issued as awards under the Plan may be construed as having an anti-takeover effect by permitting the issuance of shares to purchasers who might oppose a hostile takeover bid or oppose any efforts to amend or repeal certain provisions of our Certificate of Incorporation or Bylaws. Holders of our common stock have no preemptive or other subscription rights. There are no other material differences to the Plan as a result of the Plan Amendment. Material Terms of the Plan

Purpose. The purposes of the 2013 Stock Plan, as amended, are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to employees, directors and consultants and to promote the success of our business.

Administration. The Plan shall be administered by our Board or a committee, or a combination thereof, as determined by our Board. The Plan may be administered by different administrative bodies with respect to different classes of participants and, if permitted by the applicable laws, the board may authorize one or more officers to make awards under the Plan.

Powers of the Administrator. The specific duties delegated by our Board to the committee, the administrator shall have the authority, in its discretion:

to determine the fair market value of the common stock, provided that such determination shall be applied consistently with respect to participants under the Plan;

to select the employees, directors and consultants to whom Plan awards may from time to time be granted:

to determine whether and to what extent Plan awards are granted;

to determine the number of shares of common stock to be covered by each award granted;

to approve the form(s) of agreement(s) used under the Plan;

to determine the terms and conditions, not inconsistent with the terms of the Plan, of any award granted hereunder, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, any pro-rata adjustment to vesting as a result of a Participant's transitioning from full-to

part-time services (or vice versa), and any restriction or limitation regarding any option, optioned stock, stock purchase right or restricted stock, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

to adjust the vesting of an option held by an employee, director or consultant as a result of a change in the terms or conditions under which such person is providing services to us;

to construe and interpret the terms of the Plan and awards granted under the Plan, which constructions, interpretations and decisions shall be final and binding on all participants; and

in order to fulfill the purposes of the Plan and without amending the Plan, to modify grants of options or stock purchase rights to participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies or customs.

Eligibility. Nonstatutory Stock Options and Stock Purchase Rights may be granted to employees, directors and consultants. Incentive Stock Options may be granted only to employees, provided that employees of affiliates shall not be eligible to receive Incentive Stock Options. Each option shall be designated in the option agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. To the extent that the aggregate fair market value of shares with respect to which options designated as Incentive Stock Options are exercisable for the first time by any optionee during any calendar year exceeds \$100,000, such excess options shall be treated as Nonstatutory Stock Options.

Term of Plan. The Plan shall become effective upon its adoption by our Board. It shall continue in effect for a term of ten (10) years.

Term of Option. The term of each option shall be the term stated in the option agreement; provided that the term shall be no more than ten years from the date of grant thereof or such shorter term as may be provided in the option agreement and provided further that, in the case of an incentive stock option granted to a person who at the time of such grant is a holder of ten percent or more of our outstanding shares, the term of the option shall be five years from the date of grant thereof or such shorter term as may be provided in the option shall be five years from the date of grant thereof or such shorter term as may be provided in the option agreement.

Option Exercise Price and Consideration. The per share exercise price for the shares to be issued pursuant to exercise of an option shall be such price as is determined by the administrator and set forth in the option agreement, but shall be subject to the following:

In the case of an Incentive Stock Option

(A) granted to an employee who at the time of grant is a holder of ten percent or more of our outstanding shares, the per share exercise price shall be no less than 110% of the fair market value per share on the date of grant; or

(B) granted to any other employee, the per share exercise price shall be no less than 100% of the fair market value per share on the date of grant.

In the case of a Nonstatutory Stock Option, the per share exercise price shall be such price as determined by the administrator provided that for any Nonstatutory Stock Option granted on any date on which the common stock is a listed security to an eligible person who is, at the time of the grant of such option, a named executive of the Company, the per share exercise price shall be no less than 100% of the fair market value on the date of grant if such option is intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code.

Exercise of Option. Any option granted hereunder shall be exercisable at such times and under such conditions as determined by the administrator, consistent with the term of the Plan and reflected in the option agreement, including vesting requirements and/or performance criteria with respect to the Company and/or the optionee. The administrator shall have the discretion to determine whether and to what extent the vesting of options shall be tolled during any unpaid leave of absence; provided however that in the absence of such determination, vesting of options shall be tolled during any such leave (unless otherwise required by the Applicable Laws.

Until the issuance of the shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the optioned stock, notwithstanding the exercise of the option.

Termination of Employment or Consulting Relationship. Except as otherwise set forth in the plan the administrator shall establish and set forth in the applicable option agreement the terms and conditions upon which an option shall remain exercisable, if at all, following termination of an optionee's continuous service status, which provisions may be waived or modified by the administrator at any time in the Administrator's sole discretion. Unless otherwise provided in the option agreement, to the extent that the optionee is not vested in the optioned stock on the date of termination of his or her continuous service status, or if the optionee (or other person entitled to exercise the option) does not

Explanation of Responses:

exercise the option to the extent so entitled within the time specified in the option agreement or below (as applicable), the option shall terminate and the optioned stock underlying the unexercised portion of the option shall revert to the Plan. In no event may any option be exercised after the expiration of the option term as set forth in the option agreement.

The following provisions (1) shall apply to the extent an option agreement does not specify the terms and conditions upon which an option shall terminate upon termination of an optionee's continuous service status, and (2) establish the minimum post-termination exercise periods that may be set forth in an option agreement:

Termination other than Upon Disability or Death. In the event of termination of an optionee's continuous service status, such optionee may exercise an option for 30 days following such termination to the extent the optionee was vested in the optioned stock as of the date of such termination.

Disability of Optionee. In the event of termination of an optionee's continuous service status as a result of his or her disability (including a disability within the meaning of Section 22(e)(3) of the Internal Revenue Code), such optionee may exercise an option at any time within twelve months following such termination to the extent the optionee was vested in the optioned stock as of the date of such termination.

Death of Optionee. In the event of the death of an optionee during the period of continuous service status since the date of grant of the option, or within thirty days following termination of optionee's continuous service, the option may be exercised by optionee's estate or by a person who acquired the right to exercise the option by bequest or inheritance at any time within twelve months following the date of death, but only to the extent the optionee was vested in the optioned stock as of the date of death or, if earlier, the date the optionee's continuous service status terminated.

Buyout Provisions. The administrator may at any time offer to buy out for a payment in cash or shares an option previously granted under the Plan based on such terms and conditions as the administrator shall establish and communicate to the optionee at the time that such offer is made.

Stock Purchase Rights. When the administrator determines that it will offer stock purchase rights under the Plan, it shall advise the offeree in writing of the terms, conditions and restrictions related to the offer, including the number of shares that such person shall be entitled to purchase, the price to be paid, and the time within which such person must accept such offer. The offer to purchase shares subject to stock purchase rights shall be accepted by execution of a restricted stock purchase agreement in the form determined by the Administrator.

Unless the administrator determines otherwise, the restricted stock purchase agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's employment with the Company for any reason (including death or disability). The purchase price for shares repurchased pursuant to the restricted stock purchase agreement shall be the original purchase price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at such rate as the administrator may determine.

Taxes. As a condition of the exercise of an option or stock purchase right granted under the Plan, the participant (or in the case of the participant's death, the person exercising the option or stock purchase right) shall make such arrangements as the administrator may require for the satisfaction of any applicable federal, state, local or foreign withholding tax obligations that may arise in connection with the exercise of the option or stock purchase right and the issuance of shares. The Company shall not be required to issue any shares under the Plan until such obligations are satisfied. If permitted by the administrator, in its discretion, a participant may satisfy his or her tax withholding obligations upon exercise of an option or stock purchase right by surrendering to the Company shares that have a fair market value determined as of the applicable tax date equal to the amount required to be withheld.

Non-Transferability of Options and Stock Purchase Rights. Except as set forth in the Plan, options and stock purchase rights may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. Notwithstanding anything else, prior to the date, if any, on which the common stock becomes a listed security, the administrator may in its discretion grant nonstatutory stock options that may be transferred by instrument to an inter vivos or testamentary trust in which the options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift to "Immediate Family" (as defined below), on such terms and conditions as the administrator may in its discretion grant transferable nonstatutory stock options pursuant to option agreements specifying the manner in which such nonstatutory stock options are transferable. <u>"Immediate Family</u>" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, or sister-in-law, and shall include adoptive relationships.

Adjustments Upon Changes in Capitalization, Merger or Certain Other Transactions.

Change of Control. In the event of a Change of Control, (i) each outstanding option shall become immediately vested and exercisable, and (ii) any outstanding restricted stock shall become immediately vested and any repurchase option with respect to such restricted stock shall immediately lapse, in each case effective immediately prior to the Change of Control."

Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of common stock covered by each outstanding option or stock purchase right, the number of shares and the number of shares of common stock that have been authorized for issuance under the Plan but as to which no options or stock purchase rights have yet been granted or that have been returned to the Plan upon cancellation or expiration of an option or stock purchase right, as well as the price per share of common stock covered by each such outstanding option or stock purchase right, shall be proportionately adjusted for any increase or decrease in the number of issued shares of common stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the common stock, or any other increase or decrease in the number of issued shares of common stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration."

Dissolution or Liquidation. In the event of the dissolution or liquidation of our Company, each option and stock purchase right will terminate immediately prior to the consummation of such action, unless otherwise determined by the administrator.

Corporate Transaction. In the event of a Corporate Transaction, each outstanding option or stock purchase right shall be assumed or an equivalent option or right shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation (the <u>"Successor Corporatio</u>n"), unless the Successor Corporation does not agree to assume the award or to substitute an equivalent option or right, in which case such option or stock purchase right shall terminate upon the consummation of the transaction in consideration for a cash payment to the participant (on the date of the Corporate Transaction), with respect to each such option, equal to the excess, if any, of the fair market value of the Common Stock subject to such option over the exercise price of such option.

Amendment and Termination of the Plan. The board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation shall be made that would materially and adversely affect the rights of any optionee or holder of stock purchase rights under any outstanding grant, without his or her consent. No amendment or termination of the Plan shall materially and adversely affect options or stock purchase rights already granted, unless mutually agreed otherwise between the optionee or holder of the stock purchase rights and the administrator, which agreement must be in writing and signed by the optionee or holder and the Company.

Securities Authorized for Issuance Under Equity Compensation Plans As of September 30, 2018

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted- average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance
	(a)	(b)	(c)
Equity compensation plans approved by security holders	7,667,271	\$ 1.70	9,481,065
Equity compensation plans not approved by security holders			_
Total	7,667,271	\$ 1.70	9,481,065

Recommendation of the Board of Directors

THE BOARD RECOMMENDS THAT THE STOCKHOLDERS VOTE "FOR" TO APPROVE AN AMENDMENT TO THE COMPANY'S 2013 AMENDED AND RESTATED STOCK PLAN, AS AMENDED, TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK AUTHORIZED FOR ISSUANCE UNDER THE PLAN FROM 17,750,000 TO 22,750,000.

PROPOSAL 4

TO APPROVE AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF SHARES THE CORPORATION IS AUTHORIZED TO ISSUE TO 600,000,000 SHARES OF COMMON STOCK, PAR VALUE \$0.001 PER SHARE

Shareholders are being asked to approve an amendment to the Company's Certificate of Incorporation (the "Certificate") to increase the number of authorized shares of Company common stock from four hundred million shares (400,000,000) to six hundred million shares (600,000,000). At its meeting held on September 28, 2018, the Board of Directors approved this amendment, subject to shareholder approval, and directed that this amendment be submitted to a vote of the Company's shareholders at this Annual Meeting of Shareholders. The Board has determined that this amendment is in the best interests of the Company and its shareholders and recommends approval by the shareholders.

The Certificate currently authorizes the issuance of (i) up to 400,000,000 shares of Company common stock, each with a par value of \$0.001 per share, and (ii) up to 50,000,000 shares of Company preferred stock, each with a par value of \$0.001 per share. As of the close of business on November 5, 2018, 114,698,044 shares of common stock were outstanding and no shares of preferred stock were outstanding. In addition, as of the close of business on November 5, 2018, the Company had 7,667,271 shares of common stock subject to outstanding stock options and 9,481,065 shares reserved for issuance pursuant to future grants under the Company's current stock incentive plans. The Company also had 43,534 shares reserved subject to the vesting of restricted stock. The Company also had 55,822,622 shares reserved subject to the exercise of outstanding warrants. This means that as of November 5, 2018, the Company had just 212,287,464 shares of common stock available for corporate purposes, including, among other things, the issuance of shares for potential financings.

Purpose of Amendment

The Board believes it is in the best interest of our Company to increase the number of authorized shares of common stock in order to give us greater flexibility in considering and planning for future potential business needs.

We have no current plan, commitment, arrangement, understanding or agreement regarding the issuance of the additional shares of common stock resulting from the proposed increase in authorized shares. The additional shares of common stock will be available for issuance by our Board for various corporate purposes, including but not limited to, stock splits, stock dividends, grants under employee stock plans, financings, potential strategic transactions, including mergers, acquisitions, strategic partnerships, joint ventures, divestitures, and business combinations, as well as other general corporate transactions.

Having this additional authorized common stock available for future use will allow us to issue additional shares of common stock without the expense and delay of arranging a special meeting of shareholders.

Possible Effects of the Amendment and Additional Anti-takeover Consideration

If the amendment to the Certificate is approved, the additional authorized shares would be available for issuance at the discretion of our Board and without further shareholder approval, except as may be required by law. The additional shares of authorized common stock would have the same rights and privileges as the shares of common stock currently issued and outstanding. There are currently no shares of preferred stock outstanding. The adoption of the amendment would not have any immediate dilutive effect on the proportionate voting power or other rights of existing shareholders. Shares of common stock issued otherwise than for a stock split may decrease existing shareholders' percentage equity ownership and, depending on the price at which they are issued, could be dilutive to the voting rights of existing shareholders and have a negative effect on the market price of the common stock. Current shareholders have no preemptive or similar rights.

We cannot provide assurances that any such transactions will be consummated on favorable terms or at all, that they will enhance shareholder value or that they will not adversely affect our business or the trading price of our stock.

We have not proposed the increase in the number of authorized shares of common stock with the intention of using the additional authorized shares for anti-takeover purposes, but we would be able to use the additional shares to oppose a hostile takeover attempt or delay or prevent changes in control or management. For example, without further

Explanation of Responses:

shareholder approval, our Board could sell shares of common stock in a private transaction to purchasers who would oppose a takeover or favor our current Board. Although this proposal to increase the authorized number of shares of common stock has been prompted by business and financial considerations and not by the threat of any known or threatened hostile takeover attempt, shareholders should be aware that approval of this proposal could facilitate future efforts by us to oppose changes in control of our Company and perpetuate our management, including transactions in which the shareholders might otherwise receive a premium for their shares over then current market prices.

If our shareholders approve the increase in the number of authorized shares of common stock to 400,000,000, the Board will have authority to file with the Secretary of State of Delaware an amendment to our Certificate, effectively increasing our authorized shares by an additional 200,000,000 shares of common stock. Upon approval and following such filing with the Secretary of State of the State of Delaware, the amendment will become effective on the date it is filed. The amendment proposed by us to the Article FOURTH of our Certificate is attached to this proxy statement as <u>Appendix B</u>.

Neither Delaware law, our Certificate, nor our by-laws provides for appraisal or other similar rights for dissenting shareholders in connection with this proposal. Accordingly, our shareholders will have no right to dissent and obtain payment for their shares.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE AMENDMENT OF THE COMPANY'S CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES.

OTHER MATTERS

As of the date hereof, there are no other matters that we intend to present, or have reason to believe others will present, at the annual meeting. If, however, other matters properly come before the annual meeting, the accompanying proxy authorizes the person named as proxy or his substitute to vote on such matters as he determines appropriate.

ANNUAL REPORT ON FORM 10-K

As required, we filed our 2017 Form 10-K, as amended, with the SEC. Stockholders may obtain, free of charge, a copy of the 2017 Form 10-K by writing to us at Actinium Pharmaceuticals, Inc., 275 Madison Avenue, 7th Floor, New York NY 10016, Attention: Corporate Secretary, or from our website, *www.actiniumpharma.com* under the heading "Investor Relations" and the subheading "Company Financial Reports."

HOUSEHOLDING OF PROXY MATERIALS

SEC rules concerning the delivery of annual disclosure documents allow us or your broker to send a single Notice or, if applicable, a single set of our proxy materials to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family. This practice, referred to as "householding," benefits both you and us. It reduces the volume of duplicate information received at your household and helps us to reduce our expenses. The rule applies to our Notices, annual reports, proxy statements and information statements. Once you receive notice from your broker or from us that communications to your address will be "householded," the practice will continue until you are otherwise notified or until you revoke your consent to the practice. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If your household received a single Notice or, if applicable, a single set of proxy materials this year, but you would prefer to receive your own copy, please contact Alliance Advisors, by calling their toll free number, 1-866-804-9616.

If you do not wish to participate in "householding" and would like to receive your own Notice or, if applicable, set of our annual disclosure documents in future years, follow the instructions described below. Conversely, if you share an address with another holder of our Common Stock or Preferred Stock and together both of you would like to receive only a single Notice or, if applicable, set of our annual disclosure documents, follow these instructions:

If your shares are registered in your own name, please contact Alliance Advisors, and inform them of your request by calling them at 1-866-804-9616 or writing them at 200 Broadacres Drive, 3rd Fl., Bloomfield, NJ 07003

If a broker, bank or other nominee holds your shares, please contact the broker, bank or other nominee directly and inform them of your request. Be sure to include your name, the name of your brokerage firm and your account number.

Electronic Delivery of Company Stockholder Communications

Most stockholders can elect to view future proxy statements and annual reports over the Internet instead of receiving paper copies in the mail.

You can choose this option and save the cost of producing and mailing these documents by:

following the instructions provided on your Notice or proxy card;

following the instructions provided when you submit a proxy to vote over the Internet; or

going to www.AALvote.com/atnm.com and following the instructions provided.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON DECEMBER 20, 2018

This proxy statement and our 2017 Form 10-K to stockholders are available for viewing, printing and downloading at http://www.viewproxy.com/actinium pharma/2018 To view these materials, please have your control number available that appears on your Notice or proxy card. On this website, you can also elect to receive future distributions of our proxy statements and annual reports to stockholders by electronic delivery.

Additionally, you can find a copy of our Annual Report on Form 10-K, which includes our financial statements, for the fiscal year ended December 31, 2017 on the website of the Securities and Exchange Commission, or the SEC, at *www.sec.gov*, or in the "SEC Filings" section of the "Investors & Media" section of our website at *www.actiniumpharma.com.* You may also obtain a printed copy of our Annual Report on Form 10-K, including our financial statements, free of charge, from us by sending a written request to: Actinium Pharmaceuticals, Inc., 275 Madison Avenue, 7th Floor, New York, NY 10016, attention: Principal Financial Officer. Exhibits will be provided upon written request and payment of an appropriate processing fee.

PROPOSALS OF STOCKHOLDERS

Stockholders may present proposals intended for inclusion in our proxy statement for our 2019 Annual Meeting of Stockholders provided that such proposals are received by the Secretary of the Company in accordance with the time schedules set forth in, and otherwise in compliance with, applicable SEC regulations, and the Company's Amended and Restated Bylaws, as applicable. Proposals submitted not in accordance with such regulations will be deemed untimely or otherwise deficient; however, the Company will have discretionary authority to include such proposals in the 2018 Proxy Statement.

WHERE YOU CAN FIND MORE INFORMATION

This proxy statement refers to certain documents that are not presented herein or delivered herewith. Such documents are available to any person, including any beneficial owner of our shares, to whom this proxy statement is delivered upon oral or written request, without charge. Requests for such documents should be directed to Principal Financial Officer, Actinium Pharmaceuticals, Inc., 275 Madison Avenue, 7th Floor, New York, NY 10016, (646) 677-3875. Please note that additional information can be obtained from our website at *www.actiniumpharma.com*.

We file annual and special reports and other information with the SEC. Certain of our SEC filings are available over the Internet at the SEC's web site at *http://www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference facilities:

Public Reference Room Office 100 F Street, N.E. Room 1580 Washington, D.C. 20549

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Callers in the United States can also call 1-202-551-8090 for further information on the operations of the public reference facilities.

Annex A

AMENDMENT NO. 6 TO ACTINIUM PHARMACEUTICALS, INC. 2013 AMENDED AND RESTATED STOCK PLAN

Pursuant to Section 14 of the 2013 Amended and Restated Stock Plan, as amended (the "Plan") of Actinium Pharmaceuticals, Inc. (the "Company"), the Board of Directors of the Company has duly adopted a resolution, conditioned upon approval by the stockholders of the Company, approving this Amendment No. 6 to the Plan to increase the total number of shares of common stock, par value \$.001 per share, of the Company (the "Common Stock") reserved and available for issuance under the Plan as follows:

1. Section 3 of the Plan is hereby amended to read in its entirety as follows:

"Subject to the provisions of Section 14 of the Plan, the maximum aggregate number of Shares reserved for issuance to Participants under the Plan is 22,750,000, and the maximum aggregate number of Shares that may be granted in the form of Incentive Stock Options is 22,750,000. The Shares may be authorized, but unissued, or reacquired Common Stock. If an award should expire or become unexercisable for any reason without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. In addition, any Shares of Common Stock which are retained by the Company upon exercise of an award in order to satisfy the exercise or purchase price for such award or any withholding taxes due with respect to such exercise or purchase shall be treated as not issued and shall continue to be available under the Plan. Shares issued under the Plan and later repurchased by the Company pursuant to any repurchase right which the Company may have shall not be available for future grant under the Plan."

2. All other terms and provisions of the Plan shall remain unchanged and in full force and effect as written.

3. A majority in voting interest of the stockholders present in person or by proxy and entitled to vote at the meeting of stockholders at which this Amendment No. 6 was considered, has duly approved this Amendment No. 6 to the Plan.

IN WITNESS WHEREOF, this Amendment No. 5 to the Plan is made effective this day of , 2018.

ACTINIUM PHARMACEUTICALS, INC.

By:

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Appendix B

CERTIFICATE OF AMENDMENT TO CERTIFICATE OF INCORPORATION OF ACTINIUM PHARMACEUTICALS, INC.

Actinium Pharmaceuticals, Inc., a Delaware corporation, hereby certifies that:

1. The Certificate of Incorporation is amended (a) by replacing Article FOURTH thereof to read in its entirety as follows:

Article FOURTH

"FOURTH: The amount of the total stock this Corporation is authorized to issue is 650,000,000 shares with a par value of \$0.001 per share.

(a) Common Stock. The aggregate number of shares of Common Stock which the Corporation shall have authority to issue is 600,000,000 shares at a par value of \$0.001 per share.

(b) Preferred Stock. The aggregate number of shares of Preferred Stock which the corporation shall have authority to issue is 50,000,000 shares, par value \$0.001, which may be issued in series, with such designations, preferences, stated values, rights, qualifications or limitations as determined solely by the Board of Directors of the Corporation.

(c) Preemptive rights. No stockholder of the Corporation shall have any preemptive right to subscribe to an additional issue of stock or to any security convertible into such stock of the Corporation."

This Certificate of Amendment has been duly adopted in accordance with Section 242 of the General Corporation 2. Law of the State of Delaware (the "DGCL"), including approval by the stockholders of the corporation upon notice in accordance with Section 222 of the DGCL, at the annual meeting of the stockholders on the Corporation held on December 18, 2018.

Explanation of Responses:

IN WITNESS WHEREOF, the corporation has caused this certificate to be signed by its duly authorized officer this _____ day of December, 2018.

Sandesh Seth, Chairman and Chief Executive Officer

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