

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K/A

Amendment No. 1

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-31918

IDERA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

04-3072298

(I.R.S. Employer
Identification Number)

**167 Sidney Street
Cambridge, Massachusetts**

(Address of Principal Executive Offices)

02139

(Zip Code)

(617) 679-5500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act

Title of Class:
Common Stock, \$.001 par value

Name of Each Exchange on Which Registered
NASDAQ Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was \$28,436,000 based on the last sale price of the registrant's common stock as reported on the Nasdaq Global Market on June 29, 2012. As of April 15, 2013, the registrant had 27,663,330 shares of common stock outstanding.

EXPLANATORY NOTE

Idera Pharmaceuticals, Inc. (the “Company,” “we,” “us,” “our,” or “Idera”) is filing this Amendment No. 1 on Form 10-K/A (this “Amendment”) to its Annual Report on Form 10-K for the fiscal year ended December 31, 2012 (the “Original Form 10-K Filing”), which was originally filed with the Securities and Exchange Commission (the “SEC”) on March 11, 2013, solely to set forth information required by Items 10, 11, 12, 13 and 14 of Part III of Form 10-K. This Amendment amends and restates in its entirety Items 10, 11, 12, 13 and 14 of Part III. In addition, in accordance with Rule 12b-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), Item 15 of Part IV of the Original Form 10-K Filing has been amended and restated solely to include as exhibits new certifications by our principal executive officer and principal financial officer.

Except as expressly set forth herein, this Amendment does not reflect events occurring after the date of the Original Form 10-K Filing or modify or update any of the other disclosures contained therein in any way other than as required to reflect the amendments discussed above. Accordingly, this Amendment should be read in conjunction with the Original Form 10-K Filing and the Company’s other filings with the SEC.

The references in this Amendment to the Company’s corporate website are not intended to, and do not, incorporate by reference into this Amendment any materials contained on such website.

IDERA PHARMACEUTICALS, INC.

FORM 10-K/A

INDEX

Page

PART III.

Item 10.	Directors, Executive Officers, and Corporate Governance	1
Item 11.	Executive Compensation	4
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	21
Item 13.	Certain Relationships and Related Transactions, and Director Independence	25
Item 14.	Principal Accountant Fees and Services	29

PART IV.

Item 15.	Exhibits and Financial Statement Schedules	31
----------	--	----

PART III.

Item 10. Directors, Executive Officers, and Corporate Governance.

INFORMATION ABOUT OUR DIRECTORS

Set forth below are the names of each of the nominees for election to our board of directors, the names of each of our other continuing directors, the years in which each first became a director, their ages as of March 31, 2013, their positions and offices with our company, their principal occupations and business experience during at least the past five years and the names of other public companies for which they currently serve, or have served within the past five years, as a director. We have also included information about each director's specific experience, qualifications, attributes or skills that led our board of directors to conclude that such individual should serve as one of our directors. We also believe that all of our directors, including our nominees, have a reputation for integrity, honesty and adherence to high ethical standards. They each have demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to Idera and our board of directors.

Class III Nominees — Terms to Expire in 2013

Sudhir Agrawal, D. Phil.

Director since 1993

Dr. Agrawal, age 59, has been the chairman of our board of directors since September 2010, our President since September 2008 and our Chief Executive Officer since August 2004. He also served as our Chief Scientific Officer from January 1993 until September 2010, as our President from February 2000 to October 2005 and as Acting Chief Executive Officer from February 2000 until September 2001. Dr. Agrawal joined us in 1990 and served in various capacities before his appointment as Chief Scientific Officer, including Vice President of Discovery and Senior Vice President of Discovery. Prior to joining us, Dr. Agrawal served as a Foundation Scholar at the Worcester Foundation for Experimental Biology and carried out his post-doctoral research at the Medical Research Council's Laboratory of Molecular Biology in Cambridge, England from 1985 to 1986. We believe that Dr. Agrawal's qualifications to sit on our board of directors include his unique insights into our challenges, opportunities and operations that he has as a result of the roles he has played with us since our founding, including scientific founder, chief scientific officer, chief executive officer and chairman.

Eve E. Slater, M.D.

Director since 2010

Dr. Slater, age 67, is currently Associate Professor of Clinical Medicine at Columbia University College of Physicians and Surgeons, where she has taught in various positions since 1983. Dr. Slater was Senior Vice President, Worldwide Policy at Pfizer, Inc. from May 2007 until June 2009. Dr. Slater was the Assistant Secretary for Health, United States Department of Health and Human Services from 2002 until 2003, and was the Acting Assistant Secretary for Health from 2001 until her confirmation by the United States Senate in 2002. Dr. Slater held senior management positions at Merck Research laboratories from 1983 to 2001, including Senior Vice President of External Policy, Vice President of Corporate Public Affairs, Senior Vice President of Clinical and Regulatory Development, Executive Director of Biochemistry and Molecular Biology, and Senior Director of Biochemical Endocrinology. Dr. Slater was trained in Internal Medicine and Cardiology at Massachusetts General Hospital, is board certified in Internal Medicine and Cardiology and is a Fellow of the American College of Cardiology. We believe that Dr. Slater's qualifications to sit on our board of directors include her extensive scientific and medical background, significant public company board experience, and years of service with pharmaceutical companies and governmental institutions.

Youssef El Zein

Director since 1992

Mr. El Zein, age 64, has been the Managing Partner of Pillar Invest Corporation, a Cayman Island company that has founded and is the General Partner of a family of funds, including Pillar Pharmaceuticals I, LP and Pillar Pharmaceuticals II, LP since 2011. Mr. El Zein has been the chairman and CEO of Pillar Invest (offshore) SAL since 2009. Mr. El Zein has been managing partner of Pillar Investment Limited, a private investment firm, since 1991. Mr. El Zein obtained his Bachelor of Arts in Economics from the American University of Beirut in 1970 and a postgraduate degree in Economics from St Catherine's College, Oxford University in 1973. We believe that Mr. El Zein's qualifications to sit on our board of directors include his knowledge of our industry, his financial experience and significant role in various financings we have conducted recently and during his 20 years of service on our board of directors.

Continuing Members of the Board of Directors

Class I Directors — Terms to Expire in 2014

C. Keith Hartley

Director since 2000

Mr. Hartley, age 70, has been President of Hartley Capital Advisors, a financial consulting firm, since June 2000. Mr. Hartley was Managing Partner of Forum Capital Markets LLC, an investment banking firm, from August 1995 to May 2000. Mr. Hartley also serves as a director of Universal Display Corporation, a publicly traded company that develops organic light emitting diodes for use in flat panel displays and lighting applications. We believe that Mr. Hartley's qualifications to sit on our board of directors include his business and finance background, his investment banking background and knowledge of the capital markets and his relationship with us since 1997 when his investment banking firm led a debt financing for us.

William S. Reardon, C.P.A.

Director since 2002

Mr. Reardon, age 66, has been lead independent director of our board of directors since September 2010. He was an audit partner at PricewaterhouseCoopers LLP, where he led the Life Science Industry Practice for New England and the Eastern United States from 1986 until his retirement from the firm in July 2002. Mr. Reardon served on the board of the Emerging Companies Section of the Biotechnology Industry Organization from June 1998 to June 2000 and the board of directors of the Massachusetts Biotechnology Council from April 2000 to April 2002. He serves as a director of Synta Pharmaceuticals, Inc., a publicly-traded biopharmaceutical company, and he served as a director of Oscient Pharmaceuticals Corporation, a publicly-traded pharmaceutical company from March 2003 to March 2010. Mr. Reardon has also served as a trustee of closed-end mutual funds H&Q Healthcare Investors and H&Q Life Sciences Investors since April 2010. We believe that Mr. Reardon's qualifications to sit on our board of directors include his accounting and financial experience, including as a partner at a leading accounting firm leading its life science practice, his role in keeping the board of directors and senior management team abreast of current accounting regulations and his experience as a member of several boards of directors of biotechnology companies. Additionally, we value Mr. Reardon's role in leading the Board on matters of corporate governance, both as lead independent director and prior to his appointment to that position.

Abdul-Wahab Umari

Director since 2012

Mr. Umari, age 45, has been a managing partner of Pillar Investment Limited, a private investment firm, since 2003. Prior to joining Pillar, Mr. Umari was the Founder, Chairman and Chief Executive Officer of Transmog Inc. SAL, a telecommunications company headquartered in Lebanon from 1995 to 2001. From 1989 to 1993, Mr. Umari was a Lead Systems Engineer at Bechtel Power Corporation in Gaithersburg, Maryland. Mr. Umari has been a member of the external advisory board of the American University of Beirut since 2003 and he served on the advisory board of Foundation Henri Cartier-Bresson, a non-profit organization, from 1998 to 2008. Mr. Umari obtained an M.B.A. from New York University's Leonard N. Stern School of Business in 1995. Mr. Umari completed his undergraduate studies in Mechanical Engineering at Boston University in 1990. We believe that Mr. Umari's qualifications to sit on our board of directors include his knowledge of our industry, his financial experience and his role in various financings that we have conducted.

Class II Directors — Terms to Expire in 2015

Robert W. Karr, M.D.

Director since 2005

Dr. Karr, age 64, has been Managing Member of StartUp Partners International LLC, a consulting firm serving pharmaceutical and biotechnology clients since January 2010. Dr. Karr has served as managing director of Karr Pharm Consulting LLC since January 2008. Dr. Karr served as our President from December 2005 until December 2007. Prior to joining us, Dr. Karr was an independent consultant. From June 2000 through December 2004, Dr. Karr was a senior executive in Global Research & Development for Pfizer, Inc., a pharmaceutical company, where he served as Senior Vice President, Strategic Management from 2003 to 2004 and Vice President, Strategic Management from 2000 to 2003. Prior to its merger with Pfizer, Dr. Karr served as Vice President, Research & Development Strategy for Warner-Lambert Company, a pharmaceutical company. He also served on the board of directors of GTX, Inc., a publicly-traded biotechnology company, from 2005 to 2011. We believe that Dr. Karr's qualifications to sit on our board of directors include his broad managerial and scientific experience in the pharmaceutical industry, his understanding of our company given his role as our former President and his continuing role as a director, and his contribution to the board of directors in discussions of our drug discovery programs, clinical development strategy and clinical programs.

Malcolm MacCoss, Ph.D.**Director since 2010**

Dr. MacCoss, age 65, founded Bohicket Pharma Consulting LLC in January 2010. In this position, Dr. MacCoss consults for several pharmaceutical companies worldwide on drug discovery issues. Previously, Dr. MacCoss served as the Group Vice President for Chemical Research at the Schering-Plough Research Institute of Schering-Plough Corporation, a pharmaceutical company that is now part of Merck & Co., Inc., from August 2008 to January 2010. In this role he served as the Head of Chemistry at the Schering-Plough Kenilworth, New Jersey site and as the chair of the Schering-Plough Global Chemistry Council, a forum for formulating global chemistry strategies. From 1999 to August 2008, Dr. MacCoss served as Vice President, Basic Chemistry at the Rahway, New Jersey site of Merck Research Laboratories, of Merck & Co., Inc., a pharmaceutical company. He also served as the Vice President of Basic Chemistry and Drug Discovery Sciences, as the Deputy Site-Head of the Rahway site and as the Chairman of the Merck World-Wide Chemistry Council. Dr. MacCoss is a Fellow of the Royal Society of Chemistry, and in 2009 he was admitted into the American Chemical Society Medicinal Chemistry Hall of Fame. In 2010 he received the ACS Division of Medicinal Chemistry National Award. He also serves on the Advisory Committee of the Executive Dean for the School of Arts and Sciences, Rutgers University. We believe that Dr. MacCoss' qualifications to sit on our board of directors include his extensive scientific background, his 20 plus years experience with pharmaceutical companies, and his contribution to the board of directors in discussions of our drug discovery programs, clinical development strategy and clinical programs.

EXECUTIVE OFFICERS OF IDERA

The following table sets forth the names, ages and positions of our executive officers as of March 31, 2013:

Name	Age	Position
Sudhir Agrawal, D. Phil.*	59	Chairman of the Board of Directors, President and Chief Executive Officer
Louis J. Arcudi, III, M.B.A.	52	Senior Vice President of Operations, Chief Financial Officer, Treasurer and Secretary
Timothy M. Sullivan, Ph.D.	58	Vice President, Development Programs and Alliance Management
Robert D. Arbeit, M.D.	65	Vice President, Clinical Development

* Dr. Agrawal is a continuing member of our board of directors. See "Information about our Directors" for more information about Dr. Agrawal.

Louis J. Arcudi, III, M.B.A., has been our Senior Vice President of Operations since April 2011 and our Chief Financial Officer, Treasurer and Secretary since he joined us in December 2007. Prior to joining us, Mr. Arcudi served as Vice President of Finance and Administration and Treasurer for Peptimmune, Inc., a biotechnology company, from 2003 to 2007. From 2000 to 2003 Mr. Arcudi was Senior Director of Finance and Administration at Genzyme Molecular Oncology Corporation, a division of Genzyme Corporation, a biotechnology company. He was Director of Finance Business Planning and Operations International at Genzyme from 1998 to 2000. Prior to joining Genzyme, he held finance positions with increasing levels of responsibility at Cognex Corporation, a supplier of machine vision systems, Millipore Corporation, a provider of technologies, tools and services for bioscience, research and biopharmaceutical manufacturing, and General Motors Corporation, an automobile manufacturer. Mr. Arcudi received a M.B.A. from Bryant College and a B.S. in accounting and information systems from the University of Southern New Hampshire.

Timothy M. Sullivan, Ph.D., has been our Vice President, Development Programs and Alliance Management since April 2010 and was our Vice President, Development Programs from August 2004 until April 2010. He joined us in 2002 as Senior Director, Preclinical Drug Development. His prior professional experience includes positions as Executive Director of Non-clinical Drug Safety Evaluation for Purdue Pharma L.P., a pharmaceutical company, from 1999 to 2002, and Vice President of Eastern Operations for Oread, Inc., a contract drug development organization, from 1997 to 1999. Prior to 1997, Dr. Sullivan held a variety of technical management roles with other pharmaceutical companies and contract research organizations, including Adria, Battelle, Roma Toxicology Centre, and in veterinary medicine, including International Minerals & Chemical. Dr. Sullivan earned his B.S. in microbiology from Michigan State University in 1975. His graduate studies were at Purdue University, where he earned a M.S. degree in health physics in 1978 and a Ph.D. in toxicology in 1981.

Robert D. Arbeit, M.D., joined us in August 2009 as Vice President, Clinical Development. Prior to joining us, Dr. Arbeit was Vice President, Clinical Development, from July 2007 to July 2009, and Executive Director, Clinical Development, from February 2003 until July 2007, at Paratek Pharmaceuticals, Inc., a pharmaceutical company. Prior to that, from January 2001 to January 2003, he served at Cubist Pharmaceuticals, Inc., a pharmaceutical company, as Executive Medical Director. From 1979 to 2000, Dr. Arbeit held positions with increasing levels of responsibility at the VA Medical Center in Boston, where his last position was Associate Chief of Staff for Research. Dr. Arbeit received his B.A. from Williams College and earned an M.D. at Yale University School of Medicine. He completed a medical residency at Yale-New Haven Hospital, CT and a Clinical Fellowship in Infectious Diseases at Beth Israel Hospital, Boston, MA.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Based solely on our review of copies of reports filed by individuals and entities required to make filings pursuant to Section 16(a) of the Exchange Act or written representations from such individuals or entities, we believe that during 2012 all filings required to be made by such individuals or entities were timely made in accordance with the Exchange Act, with the exception of one late Form 4 filed by Mr. El Zein on November 15, 2012 to report the purchase of 424,242 shares of Series E convertible preferred stock and warrants to purchase 8,484,840 shares of our common stock acquired on November 9, 2012 in connection with our November 2012 Series E preferred stock and warrant financing. See “Transactions with Related Persons – Series E Preferred Stock and Warrant Financing” below for further information about our Series E preferred stock and warrant financing.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a written code of business conduct and ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted a current copy of the Code of Business Conduct and Ethics in the “Investors — Corporate Governance” section of our website, which is located at www.iderapharma.com. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our code of business conduct and ethics by posting such information on our website at www.iderapharma.com.

AUDIT COMMITTEE

Our board of directors maintains a standing audit committee. The current members of our audit committee are Mr. Reardon (Chairman), Mr. Hartley and Dr. Karr. Our board of directors has determined that all three members of the audit committee are “audit committee financial experts” within the meaning of SEC rules and regulations. Each member of the audit committee is independent as defined under applicable NASDAQ rules, including, in the case of all members of the audit committee, the independence requirements contemplated by Rule 10A-3 under the Exchange Act. During 2012, our audit committee held six meetings in person or by teleconference.

Item 11. Executive Compensation.

DIRECTOR COMPENSATION

We use a combination of cash and equity-based compensation to attract and retain candidates to serve on our board of directors. We do not compensate directors who are also our employees for their service on our board of directors. As a result, Dr. Agrawal does not receive any compensation for his service on our board of directors, including any compensation he might otherwise receive for his service as chairman of the board of directors. We periodically review our cash and equity-based compensation for non-employee directors.

Under our director compensation program, we pay our non-employee directors retainers in cash. Each director receives a cash retainer for service on the board of directors and for service on each committee on which the director is a member. The chairmen of the board and of each committee receive higher retainers for such service. These fees are payable quarterly in arrears. The fees paid to non-employee directors for service on the board of directors and for service on each committee of the board of directors on which the director is a member are as follows:

Member Annual Fee		Chairman Annual Fee
Board of Directors	\$ 35,000	\$ —
Audit Committee	\$ 7,000	\$ 15,000
Compensation Committee	\$ 7,000	\$ 15,000
Nomination and Corporate Governance Committee	\$ 3,500	\$ 7,500
Scientific Committee(1)	\$ 7,000	\$ 15,000
Service as Lead Director	\$ 17,500	\$ —

(1) This committee was eliminated as of January 1, 2013.

We also reimburse our directors for travel and other related expenses for attendance at meetings.

Our director compensation program includes a stock-for-fees policy, under which directors have the right to elect to receive common stock in lieu of cash fees. These shares of common stock are issued under our 2008 Stock Incentive Plan. The number of shares to be issued to participating directors is determined on a quarterly basis by dividing the cash fees to be paid through the issuance of common stock by the fair market value of our common stock, which is the closing price of our common stock, on the first business day of the quarter following the quarter in which the fees were earned. In 2012, Dr. MacCoss received 1,216 shares of our common stock in lieu of \$1,425 in cash fees. No other director elected to receive common stock in lieu of cash fees during 2012.

Under our director compensation program, upon their initial election to the board of directors, new non-employee directors receive an initial option grant to purchase 30,000 shares, and all non-employee directors receive an annual option grant to purchase 20,000 shares. The annual grants are made on the date of the annual meeting of stockholders.

These options vest quarterly over three years from the date of grant, subject to continued service as a director, and are granted under our 2008 Stock Incentive Plan. These options are granted with exercise prices equal to the fair market value of our common stock, which is the closing price of our common stock on the date of grant, and become immediately exercisable in full if there is a change in control of our company.

Under our retirement policy for non-employee members of the board, if a non-employee director is deemed to retire, then:

- all outstanding options held by such director will automatically vest in full, and
- the period during which such director may exercise the options will be extended to the expiration of the option under the plan.

Under the policy, a member of the board of directors will be deemed to have retired if:

- the director resigns from the board or determines not to stand for re-election and has served as a director for more than 10 years; or
- the director does not stand for re-election or is not nominated for re-election due to the fact that he or she is or will be older than 75 at the end of such director's term.

The following table sets forth a summary of the compensation we paid to our non-employee directors who served on our board in 2012.

DIRECTOR COMPENSATION FOR 2012

Name	Fees Earned or Paid in Cash (S)	Option Awards (S)(1)	Total (S)
Youssef El Zein	\$ 53,500	\$ 9,882	\$ 63,382
C. Keith Hartley	\$ 49,500	\$ 9,882	\$ 59,382
Robert W. Karr	\$ 49,000(2)	\$ 9,882	\$ 58,882
Malcolm MacCoss	\$ 57,000(2)(3)	\$ 9,882	\$ 66,882
William S. Reardon	\$ 71,000	\$ 9,882	\$ 80,882
Eve E. Slater	\$ 49,000(2)	\$ 9,882	\$ 58,882
Abdul-Wahab Umari (4)	\$ 8,750	\$ 10,770	\$ 19,520

-
- (1) These amounts represent the aggregate grant date fair value of option awards made to each listed director in 2012 as computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, "Stock Compensation" (ASC 718). These amounts do not represent the actual amounts paid to or realized by the directors during 2012. See Note 2(j) to the financial statements in the Original Form 10-K Filing regarding assumptions we made in determining the fair value of option awards. As of December 31, 2012, our non-employee directors held options to purchase shares of our common stock as follows: Mr. El Zein: 104,752; Mr. Hartley: 107,252; Dr. Karr: 185,375; Dr. MacCoss: 66,000; Mr. Reardon: 107,252; Dr. Slater: 56,000; and Mr. Umari: 30,000.
 - (2) These amounts include cash meeting fees for service on our scientific committee, which was eliminated as of January 1, 2013.
 - (3) Includes cash meeting fees of \$1,425 in lieu of which of Dr. MacCoss elected to receive 1,216 shares of our common stock.
 - (4) Mr. Umari joined our board of directors in November 2012.

COMPENSATION DISCUSSION AND ANALYSIS

Executive Summary

The compensation committee of our board of directors is responsible for establishing compensation policies with respect to our executive officers, including our chief executive officer and our other executive officers who are listed in the Summary Compensation table below and who we refer to as "named executive officers." Our compensation committee makes compensation decisions relating to our executive officers after consultation with our board of directors.

This section discusses the principles underlying our executive compensation policies and decisions and the most important factors relevant to an analysis of these policies and decisions. It provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our named executive officers. As further discussed in this section, our compensation and benefit programs help us attract, retain and motivate individuals who will maximize our business results by working to meet or exceed established company or individual objectives. In addition, we reward our executive officers for meeting certain developmental milestones, such as completing advancements in product candidate development, strategic partnerships or other financial transactions that add to our capital resources or create value for stockholders. We also decline to increase salaries, make bonus awards or issue equity compensation in the event that the company's performance falls below expectations or developmental milestones are not met.

Compensation Philosophy and Objectives

The compensation committee seeks to achieve the following broad goals in connection with our executive compensation programs and decisions regarding individual compensation:

- attract, retain and motivate the best possible executive talent;
- ensure executive compensation is aligned with our corporate strategies and business objectives, including our short-term operating goals and longer-term strategic objectives;
- promote the achievement of key strategic and financial performance measures by linking short- and long-term cash and equity incentives to the achievement of measurable corporate and individual performance goals; and
- align executives' incentives with the creation of stockholder value.

To achieve these objectives, the compensation committee evaluates our executive compensation program with the goal of setting compensation at levels the committee believes are competitive with those of other companies in our industry and our region that compete with us for executive talent. In addition, our executive compensation program ties a substantial portion of each executive officer's overall compensation to key strategic, financial, research and operational goals such as clinical trial and regulatory progress, intellectual property portfolio development, establishment and maintenance of key strategic relationships and exploration of business development opportunities, as well as our financial and operational performance. We also provide a portion of our executive compensation in the form of stock options or other stock awards that vest over time from the time of the grant of the option awards and from the time of achievement of performance milestones, which we believe helps to retain our executives and align their interests with those of our stockholders by allowing them to participate in the longer term success of our company as reflected in stock price appreciation.

During 2011 and 2012, our compensation committee engaged Radford Surveys + Consulting, or Radford, to provide advice and recommendations regarding the amount and form of executive compensation, equity incentive programs and compensation generally. Radford did not provide any services to our company during 2011 or 2012 other than pursuant to its engagement by the compensation committee.

As part of its engagement in November 2010, Radford provided data on executive compensation from a peer group of publicly traded companies developed by the committee with Radford in November 2010. The committee selected these companies at that time in the belief that these companies had business life cycles, growth profiles, market capitalizations, products, research and development investment levels and number/capabilities of employees that were then comparable to ours. In working with Radford to develop the peer group, the committee and Radford generally targeted companies ranging from one-third to three times Idera's size in terms of number of employees and market capitalization, with lead drug candidates typically in Phase 2 or Phase 3. The companies included in the peer group were:

Achillion Pharmaceuticals, Inc.	Anadys Pharmaceuticals, Inc.	ARIAD Pharmaceuticals, Inc.
ArQule, Inc.	AVI BioPharma, Inc.	BioCryst Pharmaceuticals, Inc.
Celldex Therapeutics, Inc.	Cyclacel Pharmaceuticals, Inc.	Cytokinetics, Incorporated
CytRx Corp.	Dynavax Technologies Corp.	GenVec, Inc.
Infinity Pharmaceuticals, Inc.	Micromet, Inc.	Myrexix, Inc.
Novavax, Inc.	Peregrine Pharmaceuticals, Inc.	Sangamo BioSciences, Inc.
Synta Pharmaceuticals Corp.		

In November 2010, Radford also provided compensation survey data from the Radford Global Life Science Survey, a survey of U.S. biotech companies. Our compensation committee reviews a blend of the peer group and survey data in its determinations regarding executive compensation. We refer to this blended data as the "market compensation data."

Our compensation committee considered this blended data in December 2010 in connection with the establishment of base salaries for our named executive officers in 2011 and in December 2011 in connection with its determination of option grants for our named executive officers in December 2011 and January 2012.

Our compensation committee intends that if the company achieves its goals and the executive performs at the level expected, then the executive should have the opportunity to receive compensation that is competitive with industry norms. Accordingly, our compensation committee generally targets overall compensation for executives towards the 50th percentile of the market compensation data. However, the compensation committee from time to time targets a different percentile for individual elements of compensation or specific individuals based on experience, performance levels and potential performance levels of the executive and changes in duties and responsibilities.

In order to accomplish its objectives consistent with its philosophy for executive compensation, our compensation committee typically takes the following actions annually:

- reviews executive officer performance;
- reviews all components of executive officer compensation, including base salary, cash bonuses, equity compensation, the dollar value to the executive and cost to us of all health and life insurance and other employee benefits and the estimated payout obligations under severance and change in control scenarios;
- seeks input from our chief executive officer on the performance of all other executive officers;
- consults with an independent compensation consultant;
- holds executive sessions (without our management present);
- reviews information regarding the performance and executive compensation of other companies; and
- reviews all of the foregoing with the board of directors.

Under our annual performance review program for our executives, annual performance goals are determined for our company as a whole and for each executive individually. Annual corporate goals are proposed by management and approved by the compensation committee. These corporate goals target the achievement of specific research, clinical, operational and financial milestones.

Annual individual goals focus on contributions that facilitate the achievement of the corporate goals and are closely aligned with the corporate goals. Individual goals are proposed by each executive and approved by the chief executive officer. Typically, the compensation committee sets the chief executive officer's goals and reviews and discusses with the chief executive officer the goals for all other executive officers. The individual performance goals of each named executive officer consist primarily of the key objectives and goals from our annual business plan that relate to the functional area for which the named executive officer is responsible. The individual performance goals for the chief executive officer are largely coextensive with the corporate goals.

Generally, at the end of each year, the compensation committee evaluates corporate and individual performance. The compensation committee considers the achievement of the corporate goals and individual performance as factors in determining annual salary increases, annual bonuses and annual stock option awards granted to our executives, although because of their high level of responsibility within our company, the determination of annual bonuses for our executive officers, including our named executive officers, is heavily weighted on our corporate performance. In assessing corporate performance, the committee evaluates corporate performance alongside the approved corporate goals for the year and also evaluates other aspects of corporate performance, including achievements and progress made by the company outside of the corporate goals. In assessing individual performance, the compensation committee evaluates corporate performance in the areas of each officer's responsibility and relies on the chief executive officer's evaluation of each officer. The chief executive officer prepares evaluations of the other executives and in doing so compares individual performance to the individual performance goals. The chief executive officer recommends annual executive salary increases, annual stock option awards and bonuses, if any, which are then reviewed and approved by the compensation committee. In the case of the chief executive officer, the compensation committee conducts his individual performance evaluation. During this process, the compensation committee consults with its compensation consultant and, prior to approving compensation for executive officers, consults with the board of directors.

For all executives, annual base salary increases, if any, are implemented during the first calendar quarter of the year. Annual stock option awards and bonuses, if any, are granted as determined by the compensation committee, typically in the fourth quarter of the applicable year.

The compensation committee does not plan to approve annual equity grants to employees, including named executive officers, at a time when our company is in possession of material non-public information. We do not award stock options to named executive officers concurrently with the release of material non-public information.

In light of continued uncertainties with respect to our clinical development plan, results of our ongoing clinical trials and our financial condition, in November 2012 the compensation committee determined not to conduct the compensation and performance review for our named executive officers that it generally conducts at the end of the year. Instead, the compensation committee agreed to defer such review until the results of our phase 2 clinical trial of IMO-3100 and our phase 1 clinical trial of IMO-8400 were known and we had sought and obtained additional financing.

Elements of Executive Compensation

The compensation program for our executives generally consists of five elements based upon the foregoing objectives:

- base salary;
- annual cash bonuses;
- stock option awards;
- health care and life insurance and other employee benefits; and
- severance and change in control benefits.

The value of our variable, performance-based compensation is split between short-term compensation in the form of a cash bonus and long-term compensation in the form of stock option awards that vest over time from the time of the grant of the option awards and from the time of achievement of performance milestones. The annual cash bonus is intended to provide an incentive to our executives to achieve near-term operational objectives. The stock option awards provide an incentive for our executives to achieve longer-term strategic business goals, which should lead to higher stock prices and increased stockholder value. We have not had any formal or informal policy or target for allocating compensation between long-term and short-term compensation, between cash and non-cash compensation or among the different forms of non-cash compensation. Instead, the compensation committee, after reviewing industry information and our cash resources, determines subjectively what it believes to be the appropriate level and mix of the various compensation components.

We do not have any defined benefit pension plans or any non-qualified deferred compensation plans.

We entered into a multi-year employment agreement with our chief executive officer, Dr. Agrawal, in October 2005, which was amended in 2008 to ensure compliance with Section 409A of the Internal Revenue Code of 1986, as amended. In August 2011, we entered into an amendment to our employment offer letter with our senior vice president of operations and chief financial officer, Mr. Arcudi, and in December 2011, we entered into an amended and restated employment letter with Mr. Arcudi. These agreements are described below under the caption "Agreements with our Named Executive Officers."

Base Salary

In establishing base salaries for our executive officers, our compensation committee typically reviews the market compensation data presented by Radford, considers historic salary levels of the executive officer and the nature of the executive officer's responsibilities, compares the executive officer's base salary with those of our other executives and considers the executive officer's performance. The compensation committee also typically considers the challenges involved in hiring and retaining managerial personnel and scientific personnel with extensive experience in the chemistry of DNA and RNA and its application to toll-like receptors because of the new nature of this technology, general economic conditions and our financial condition. In assessing the executive officer's performance, the compensation committee considers the executive officer's role in the achievement of the annual corporate goals, as well as the performance evaluation prepared by our chief executive officer with respect to such executive officer. The compensation committee considers such evaluation as a means of informing the committee's decision as to whether the executive officer's performance was generally consistent with the company's expectations.

In November 2011, the compensation committee set base salaries for 2012. In light of setbacks during 2011 regarding our research and development programs, our board's adoption of new strategic goals for the company in September 2011 and our cash resources, the committee determined that annual base salaries for the named executive officers would not be increased for 2012 and would remain at 2011 levels, except that Mr. Arcudi's base salary was increased by \$5,000 as a result of his appointment in April 2011 as our senior vice president of operations. As a result of its deferral of its annual compensation and performance review, the compensation committee has not made any determinations with respect to base salaries for 2013.

Cash Bonuses

The compensation committee generally structures cash bonuses by linking them to the achievement of the annual corporate goals, corporate performance outside of the corporate goals and individual performance. The amount of the bonus paid, if any, varies among the executive officers depending on individual performance and their contribution to the achievement of our annual corporate goals and corporate performance generally. The compensation committee reviews and assesses corporate goals and individual performance by executive officers and considers the reasons why specific goals have been achieved or have not been achieved. While achievement against the applicable corporate goals is given substantial weight in connection with the determination of annual bonus, consideration is also given to an evaluation of our named executive officers' individual performance based on analysis of achievement of individual performance goals as well as the following subjective criteria:

- leadership,
- management,
- judgment and decision making skills,
- results orientation and
- communication.

No formula is applied to the analysis of the achievement of corporate goals or individual goals by executive officers for purposes of the committee's determination of annual cash bonuses.

The compensation committee did not set performance goals for 2012 given the fluidity of our business plans and in light of the uncertainties with respect to our clinical development plan, results of our ongoing clinical trials and our financial condition. Instead, the compensation committee decided it would assess individual and corporate achievements as part of its annual compensation and performance review at the end of 2012. As a result of its deferral of its annual compensation and performance review, the compensation committee has not made any determination with respect to 2012 cash bonuses for our named executive officers.

Equity Compensation

Our equity award program is the primary vehicle for offering long-term incentives to our executive officers, including our named executive officers. We believe that equity awards provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interest of our named executive officers and our stockholders. Equity grants are intended as both a reward for contributing to the long-term success of our company and an incentive for future performance. The vesting feature of our equity awards is intended to further our goal of executive retention by providing an incentive to our named executive officers to remain in our employ during the vesting period. In determining the size of equity awards to our executives, our compensation committee considers the achievement of our annual corporate goals, individual performance, the applicable executive officer's previous awards, including the exercise price of such previous awards, the recommendations of management and the market compensation data presented by Radford.

Our equity awards have typically taken the form of stock options. However, under the terms of our stock incentive plan, we may grant equity awards other than stock options, such as restricted stock awards, stock appreciation rights and restricted stock units.

The compensation committee approves all equity awards to our executive officers. The compensation committee reviews all components of the executive officer's compensation when determining annual equity awards to ensure that an executive officer's total compensation conforms to our overall philosophy and objectives.

The compensation committee typically makes initial stock option awards to new executive officers upon commencement of their employment and annual stock option awards thereafter. Equity awards to our named executive officers are typically granted annually in conjunction with the annual performance review. This review typically occurs at the regularly scheduled meeting of the compensation committee held in the fourth quarter of each year. In general, our option awards vest over four years in 16 equal quarterly installments. The exercise price of stock options equals the fair market value of our common stock on the date of grant, which is typically equal to the closing price of our common stock on Nasdaq on the date of grant.

In November 2011, the compensation committee granted annual option awards to our named executive officers, effective December 5, 2011. In light of setbacks during 2011 regarding our research and development programs and our board's adoption of new strategic goals in September 2011, as well as the committee's determination not to increase salaries for 2012 or grant bonuses for 2011 to our named executive officers, the committee structured these options to retain our named executive officers and to align the interests of our executive officers with the interests of our stockholders in the value creation that could arise beginning in 2012 from the achievement of our new strategic goals. As a result, the committee increased the size of the annual option awards, specifically targeting the 75th percentile of the market compensation data, and linked a portion of the vesting of the option awards to the achievement of specified milestones with the option awards having the following time based vesting and performance vesting components:

- 25% of the shares subject to the option become exercisable over four years in 16 equal quarterly installments with the first installment vesting February 28, 2012;
- 25% of the shares subject to the option become exercisable on November 28, 2012;
- 50% of the shares subject to the option become exercisable upon the achievement of specified performance milestones with 25% of the number of shares corresponding to a particular performance milestone vesting upon achievement of the performance milestone and the balance of such shares vesting in three equal installments on the first, second and third anniversaries of the achievement of such milestone; and
- 100% of the unexercisable shares subject to the option become exercisable if, upon or within 12 months after a change in control of the company, the named executive officer's employment is terminated by us without cause or the named executive officer terminates his employment for good reason.

The compensation committee adopted this vesting structure in order to address the following components of incentive compensation:

- our typical annual long-term incentive grant, vesting quarterly over four years;
- a short-term retention grant, vesting in full upon the first anniversary of the grant, which the committee adopted based on the need for executive retention and in recognition that our officers had not received salary increases for 2012 or cash bonuses for 2011; and
- a performance grant, vesting based on the achievement of specified performance milestones modeled on our strategic goals adopted by our board in September 2011.

The performance-based portion of the option awards was tied to nine specified performance milestones. These milestones relate to clinical trials and regulatory processes for our lead compounds, business development transactions and corporate financing. Each milestone must be achieved by a specified date ranging from March 31, 2012 to June 30, 2013 in order to be achieved. The committee designed these milestones to be challenging milestones that the committee believed could be reasonably achieved within the specified timing. Each milestone was weighted and assigned a percentage by the committee such that the achievement of a particular milestone will result in the commencement of vesting of that percentage of the shares subject to the performance-based portion of the option. The total weighting of the milestones equals 125% with the effect that a named executive officer can vest with respect to all of the shares subject to the performance-based portion of the option even if one or more milestones are not achieved. However, even if milestones with aggregate weighting of more than 100% are achieved, the named executive officer will not be entitled to more than 100% of the shares subject to the performance-based portion of the option.

In determining the size of the option awards, the compensation committee reviewed the market compensation data presented by Radford regarding annual option grants on the basis of percentage ownership (as opposed to market value), specifically targeting the 75th percentile of the market compensation data. The committee also considered corporate and individual performance during

2011, the value of options then held by executive officers and our chief executive officer's recommendations with respect to the awards to be made to the other executive officers. On this basis, the committee granted options to each of our named executive officer, effective December 2011, including an option to Dr. Agrawal to purchase 500,000 shares. In addition to these options, the committee granted Dr. Agrawal a similar performance option in January 2012 to purchase 35,000 shares on the same terms.

As a result of its deferral of its annual compensation and performance review, the compensation committee has not made any determination with respect to annual options awards or other equity awards for 2012.

Benefits and Other Compensation

We maintain broad-based benefits that are provided to all employees, including health and dental insurance, life and disability insurance and a 401(k) plan. During 2012, consistent with our prior practice, we matched 50% of the employee contributions to our 401(k) plan up to a maximum of 6% of the participating employee's annual salary, resulting in a maximum company match of 3% of the participating employee's annual salary, and subject to certain additional statutory dollar limitations. Named executive officers are eligible to participate in all of our employee benefit plans, in each case on the same basis as other employees and subject to any limitations in such plans. Each of our named executive officers contributed to our 401(k) plan and their contributions were matched by us.

Our board of directors has adopted a retirement policy to address the treatment of options in the event of an employee's retirement that applies to all employees, including all officers. For purposes of this policy, an employee will be deemed to have retired if the employee terminates his or her employment with us, has been an employee of ours for more than 10 years and is older than 65 upon termination of employment. Under the policy, if an employee retires, then

- all outstanding options held by the employee will automatically vest in full; and
- the period during which the employee may exercise the options will be extended to the expiration of the term of the option under the plan.

Our board adopted this policy for our employees in recognition of the importance of stock options to the compensation of employees and in order that our employees get the full benefit of the options held by them if he or she retires after making 10 years of contributions to the company.

We occasionally pay relocation expenses for newly hired executive officers who we require to relocate as a condition to their employment by us. We also occasionally pay local housing expenses and travel costs for executives who maintain a primary residence outside of a reasonable daily commuting range to our headquarters. We believe that these are typical benefits offered by comparable companies to executives who are asked to relocate and that we would be at a competitive disadvantage in trying to attract executives who would need to relocate in order to work for us if we did not offer such assistance. In 2012, Dr. Sullivan received reimbursement for local housing expenses because Dr. Sullivan maintains a primary residence outside of a reasonable daily commuting range to our headquarters.

Our named executive officers also may participate in our employee stock purchase plan, which is generally available to all employees who work over 20 hours per week, including our executive officers so long as they own less than 5% of our common stock, including for this purpose vested and unvested stock options. Due to his stock ownership, Dr. Agrawal is not eligible to participate in the employee stock purchase plan. None of our named executive officers participated in the employee stock purchase plan during 2012.

Severance and Change-in-Control Benefits

We currently have an employment agreement with Dr. Agrawal and an employment letter agreement with Mr. Arcudi under which we agreed to provide benefits in the event of the termination of their employment under specified circumstances. We have provided more detailed information about these benefits, along with estimates of their value under various circumstances, under the captions "Agreements with our Named Executive Officers" and "Potential Payments Upon Termination or Change in Control" below.

In December 2011, we entered into an amended and restated employment letter with Mr. Arcudi. In connection with this amendment and restatement, we increased the period of time following termination of employment for which he is entitled to receive severance and healthcare, disability and life insurance benefits from three months to 12 months in connection with a termination by us without cause at any time, and provided severance and healthcare, disability and life insurance benefits for 12 months in connection with termination by Mr. Arcudi for good reason upon or within 12 months after a change of control. The committee agreed to these provisions based in part on market compensation data from Radford.

We believe providing severance and/or change-in-control benefits as a component of our compensation structure that can help us compete for executive talent and attract and retain highly talented executive officers whose contributions are critical to our long-term success. After reviewing the practices of companies in general industry surveys provided by our independent compensation consultant, we believe that our severance and change-in-control benefits are appropriate.

Deductibility of Executive Compensation/Internal Revenue Code Section 162(m)

Section 162(m) of the Internal Revenue Code generally disallows a tax deduction to public companies for certain compensation in excess of \$1 million per person paid to our chief executive officer and the three other officers (other than our chief executive officer and chief financial officer) whose compensation is required to be disclosed under the Securities Exchange Act of 1934, as amended by reason of being among our three other most highly compensated officers. Certain compensation, including qualified performance-based compensation, will not be subject to the deduction limit if specified requirements are met. The compensation committee reserves the right to use its judgment to authorize compensation payments that may be subject to the limit when the compensation committee believes such payments are appropriate and in the best interests of our company and our stockholders. There can be no assurance that compensation attributable to awards granted under our plans will be treated as qualified performance-based compensation under Section 162(m).

Agreements with our Named Executive Officers

We have entered into agreements with certain of our named executive officers, as discussed below, that provide benefits to the executives upon their termination of employment in certain circumstances or under which we have agreed to specific compensation elements. Other than as discussed below, our named executive officers do not have employment agreements with us, other than standard employee confidentiality agreements, and are at-will employees.

Sudhir Agrawal, D. Phil.

We are a party to an employment agreement, as amended, with Dr. Agrawal, our chairman, president and chief executive officer. The agreement had an initial three-year term that is automatically extended for an additional year on October 19th of each year during the term of the agreement unless either party provides prior written notice to the other that the term of the agreement is not to be extended. As a result, on each October 19th, the term of the agreement, as extended, will be three years. On October 19, 2012, the term was extended from October 19, 2014 to October 19, 2015.

Under the agreement, Dr. Agrawal is currently entitled to receive an annual base salary of \$549,000 or such higher amount as our compensation committee or our board of directors may determine. In addition, under the agreement, Dr. Agrawal is eligible to receive an annual bonus in an amount equal to between 20% and 70% of his base salary, as determined by the compensation committee or our board of directors.

If we terminate Dr. Agrawal's employment without cause or if he terminates his employment for good reason, as such terms are defined in the agreement, we have agreed to:

- continue to pay Dr. Agrawal his base salary as severance for a period ending on the earlier of the final day of the term of the agreement in effect immediately prior to such termination and the second anniversary of his termination date;
- pay Dr. Agrawal a lump sum cash payment equal to the pro rata portion of the annual bonus that he earned in the year preceding the year in which his termination occurs;
- continue to provide Dr. Agrawal with healthcare, disability and life insurance benefits for a period ending on the earlier of the final day of the term of the agreement in effect immediately prior to the termination date and the second anniversary of the termination date, except to the extent another employer provides Dr. Agrawal with comparable benefits;

-
- accelerate the vesting of any stock options or other equity incentive awards previously granted to Dr. Agrawal as of the termination date to the extent such options or equity incentive awards would have vested had he continued to be an employee until the final day of the term of the agreement in effect immediately prior to such termination; and
 - permit Dr. Agrawal to exercise any vested stock options until the second anniversary of the termination date.

If Dr. Agrawal's employment is terminated by him for good reason or by us without cause in connection with, or within one year after, a change in control, we have agreed to provide Dr. Agrawal with all of the items listed above, except that in lieu of the severance amount described above, we will pay Dr. Agrawal a lump sum cash payment equal to his base salary multiplied by the lesser of the aggregate number of years or portion thereof remaining in his employment term and two years. We have also agreed that if we execute an agreement that provides for our company to be acquired or liquidated, or otherwise upon a change in control, all unvested stock options held by Dr. Agrawal will vest in full.

If required by Section 409A of the Internal Revenue Code, the payments we are required to make to Dr. Agrawal for the first six months following termination of his employment under his agreement will be made as a lump sum on the date that is six months and one day following such termination.

Our employment agreement with Dr. Agrawal provides that if all or a portion of the payments made under the agreement are subject to the excise tax imposed by Section 4999 of the Code, or a similar state tax or assessment, we will pay him an amount necessary to place him in the same after-tax position as he would have been had no excise tax or assessment been imposed. Any amounts paid pursuant to the preceding sentence will also be increased to the extent necessary to pay income and excise tax on those additional amounts.

In the event of Dr. Agrawal's death or the termination of his employment due to disability, we have agreed to pay Dr. Agrawal or his beneficiary a lump sum cash payment equal to the pro rata portion of the annual bonus that he earned in the year preceding his death or termination due to disability. Additionally, any stock options or other equity incentive awards previously granted to Dr. Agrawal and held by him on the date of his death or termination due to disability will vest as of such date to the extent such options or equity incentive awards would have vested had he continued to be an employee until the final day of the term of the employment agreement in effect immediately prior to his death or termination due to disability. Dr. Agrawal or his beneficiary will be permitted to exercise such stock options until the second anniversary of his death or termination of employment due to disability.

Dr. Agrawal has agreed that during his employment with us and for a one-year period thereafter, he will not hire or attempt to hire any of our employees or compete with us.

Louis J. Arcudi, III

We are a party to an employment letter with Mr. Arcudi, our Senior Vice President of Operations, Chief Financial Officer, Treasurer and Secretary. If we terminate Mr. Arcudi's employment without cause at any time, or if he terminates his employment for good reason upon a change in control or within one year after a change of control, as such terms are defined in the agreement, we have agreed to:

- continue to pay Mr. Arcudi his base salary as severance for twelve months following such termination payable in accordance with our then current payroll practices; and
- continue to provide Mr. Arcudi with healthcare, disability and life insurance benefits for twelve months following such termination, except to the extent another employer provides Mr. Arcudi with comparable benefits.

Our agreement to pay severance and benefits is subject to Mr. Arcudi's entering into a separation and release agreement.

If required by Section 409A of the Internal Revenue Code, the payments we are required to make to Mr. Arcudi in the first six months following the termination of his employment under his agreement will be made as a lump sum on the date that is six months and one day following such termination.

Summary Compensation Table

The table below summarizes compensation paid to or earned by our named executive officers. Our named executive officers have no stock awards, defined benefit pension or non-qualified compensation to report for 2012, 2011 and 2010.

Summary Compensation Table for Fiscal Year 2012

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Non-Equity Plan Compensation (2)</u>	<u>All Other Compensation (\$)(3)</u>	<u>Total (\$)</u>
Sudhir Agrawal, D. Phil., Chairman, President and Chief Executive Officer	2012	\$ 549,000	\$ 24,019	\$ —	\$ 75,447	\$ 648,466
	2011	\$ 549,000	\$ 334,500	\$ —	\$ 30,606	\$ 914,156
	2010	\$ 530,000	\$362,795	\$260,000	\$ 29,710	\$1,182,505
Louis J. Arcudi, III Senior Vice President of Operations, Chief Financial Officer, Treasurer and Secretary	2012	\$ 315,000	\$ —	\$ —	\$ 43,523	\$ 358,523
	2011	\$ 310,000	\$ 133,820	\$ —	\$ 30,135	\$ 473,955
	2010	\$ 290,000	\$ 148,476	\$ 55,000	\$ 29,092	\$ 522,568
Timothy M. Sullivan, Ph. D. Vice President, Development Programs and Alliance Management	2012	\$ 299,000	\$ —	\$ —	\$ 49,877	\$ 348,877
	2011	\$ 299,000	\$ 100,365	\$ —	\$ 46,978	\$ 446,343
	2010	\$289,120	\$ 113,247	\$ 51,000	\$ 45,893	\$ 499,260
Robert D. Arbeit, M.D. Vice President, Clinical Development	2012	\$ 300,000	\$ —	\$ —	\$11,968	\$ 311,968
	2011	\$ 300,000	\$ 100,365	\$ —	\$ 11,913	\$ 412,278
	2010	\$ 290,100	\$ 112,634	\$ 51,000	\$ 11,766	\$ 465,500

- (1) Represents the aggregate grant date fair value of options granted to each of the named executive officers as computed in accordance with ASC 718. These amounts do not represent the actual amounts paid to or realized by the named executive officers. See Note 2(j) to the financial statements in the Original Form 10-K Filing regarding assumptions we made in determining the fair value of option awards.
- (2) Represents bonuses paid under our cash bonus program based upon the achievement of corporate goals and the specified bonus target for each named executive officer.
- (3) “All Other Compensation” for 2012 for each of the named executive officers includes the following:

	<u>Dr. Agrawal</u>	<u>Mr. Arcudi</u>	<u>Dr. Sullivan</u>	<u>Dr. Arbeit</u>
Premiums paid by us for all insurance plans	\$ 22,681	\$ 22,192	\$ 25,440	\$ 4,468
Company match on 401(k)	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500
Reimbursement for housing expenses	—	—	\$ 16,937	—
Unused vacation accrual	\$ 45,266	\$ 13,831	—	—

See “Compensation Discussion and Analysis” above for a discussion of annual cash bonuses and the amount of salary and bonus in proportion to total compensation.

Grants of Plan-Based Awards

The following table sets forth information regarding stock options granted to Dr. Agrawal during 2012. There were no other stock options and no non-equity incentive plan awards granted during 2012.

Grants of Plan-Based Awards for Fiscal Year 2012

<u>Name</u>	<u>Grant Date</u>	<u>All Other Option Awards: Number of Securities Underlying Options (#)⁽¹⁾</u>	<u>Exercise or Base Price of Option Awards (\$/Sh)</u>	<u>Grant Date Fair Value of Option Awards (\$)⁽²⁾</u>
Sudhir Agrawal, D. Phil.	1/3/2012	35,000	1.16	\$ 24,019
Louis J. Arcudi, III	—	—	—	—
Timothy M. Sullivan, Ph.D.	—	—	—	—
Robert D. Arbeit, M.D.	—	—	—	—

- (1) The stock options granted to each of the named executive officers listed above were granted pursuant to our 2008 Stock Incentive Plan. The term of these options is ten years. The stock options vest based on a combination of performance based vesting and time based vesting. See “Compensation Discussion and Analysis – Elements of Compensation – Equity Compensation” for a full description of the vesting terms for these options. See “Agreements with our Named Executive Officers” for further information about acceleration of vesting of Dr. Agrawal’s options in the event of the termination of his employment and/or a change of control.
- (2) Represents the aggregate grant date fair value of option awards made to named executive officers in 2012 as computed in accordance with ASC 718. These amounts do not represent the actual amounts paid to or realized by the named executive officers during 2012. See Note 2(j) to the financial statements in the Original Form 10-K Filing regarding assumptions we made in determining the fair value of option awards.

Outstanding Equity Awards At Fiscal Year-End

The following table sets forth information regarding the outstanding stock options held by our named executive officers as of December 31, 2012. None of our named executive officers held shares of unvested restricted stock as of December 31, 2012.

Outstanding Equity Awards At Fiscal Year-End for 2012

<u>Name</u>	<u>Number of Securities Underlying Unexercised Options (#) Exercisable</u>	<u>Number of Securities Underlying Unexercised Options (#) Unexercisable</u>	<u>Option Exercise Price (\$)</u>	<u>Option Expiration Date</u>
Sudhir Agrawal, D. Phil. ⁽¹⁾	31,250	—	\$ 4.16	11/30/2014
	125,000	—	\$ 4.48	5/12/2015
	50,000	—	\$ 5.76	6/1/2015
	37,500	—	\$ 4.24	12/15/2015
	125,000	—	\$ 5.10	12/14/2016
	62,500	—	\$ 7.05	6/25/2017
	125,000	—	\$ 13.28	1/2/2018
	200,000	—	\$ 8.70	12/16/2018
	225,000(2)	75,000(2)	\$ 5.24	12/23/2019
	115,500(3)	115,500(3)	\$ 2.74	12/27/2020
184,999(4)	253,751(4)	\$ 1.157	11/28/2021	
	12,950(4)	17,764(4)	\$ 1.16	11/28/2021
Louis J. Arcudi, III	80,000	—	\$ 12.25	12/3/2017
	40,000	—	\$ 8.70	12/16/2018
	82,500(2)	27,500(2)	\$ 5.24	12/23/2019
	47,500(3)	47,500(3)	\$ 2.74	12/27/2020
	74,000(4)	101,500(4)	\$ 1.157	11/28/2021
Timothy M. Sullivan, Ph.D.	5,625	—	\$ 8.96	12/16/2013
	58,750	—	\$ 4.16	11/30/2014
	12,500	—	\$ 4.24	12/15/2015
	20,000	—	\$ 5.10	12/14/2016
	25,000	—	\$ 13.28	1/2/2018
	35,000	—	\$ 8.70	12/16/2018
	52,500(2)	17,500(2)	\$ 5.24	12/23/2019
	36,250(3)	36,250(3)	\$ 2.74	12/27/2020
55,499(4)	76,126(4)	\$ 1.157	11/28/2021	

Robert D. Arbeit, M.D.	32,500(5)	7,500(5)	\$ 6.43	8/3/2019
	12,750(2)	4,250(2)	\$ 5.24	12/23/2019
	36,250(3)	36,250(3)	\$ 2.74	12/27/2020
	55,499(4)	76,126(4)	\$ 1.157	11/28/2021

- (1) See "Agreements with our Named Executive Officers" for further information about acceleration of vesting of Dr. Agrawal's options in the event of the termination of his employment and/or a change of control.
- (2) 6.25% of the shares subject to this option vest quarterly from the date of grant until December 23, 2013 when all shares will be vested. The total number of shares subject to the option equals the sum of the figures in the exercisable and unexercisable columns.
- (3) 6.25% of the shares subject to this option vest quarterly from the date of grant until December 27, 2014 when all shares will be vested. The total number of shares subject to the option equals the sum of the figures in the exercisable and unexercisable columns.
- (4) The shares subject to this option vest as follows:
 - 25% of the shares vest over four years in 16 equal quarterly installments with the first installment vesting February 28, 2012;
 - 25% of the shares vest on November 28, 2012;
 - 50% of the shares vest upon the achievement of specified performance milestones with 25% of the number of shares corresponding to a particular performance milestone vesting upon achievement of the performance milestone and the balance of such shares vesting in three equal installments on the first, second and third anniversaries of the achievement of such milestone; and
 - 100% of the unexercisable shares subject to the option vest if, upon or within 12 months after a change in control of the company, the named executive officer's employment is terminated by us without cause or the named executive officer terminates his employment for good reason.
- (5) 6.25% of the shares subject to this option vest quarterly from the date of grant until August 3, 2013 when all shares will be vested. The total number of shares subject to the option equals the sum of the figures in the exercisable and unexercisable columns.

Option Exercises and Stock Vested

None of our named executive officers exercised any options during the year ended December 31, 2012.

Potential Payments under Termination or Change in Control

We have an employment agreement with Dr. Agrawal that provides for severance benefits and acceleration of vesting of equity awards following a termination of his employment with our company. Additionally, Mr. Arcudi's employment offer letter provides for severance benefits in certain circumstances. These agreements are described above under the caption "Agreements with our Named Executive Officers." Neither Dr. Sullivan nor Dr. Arbeit is entitled to any severance benefits following a termination of his employment with our company. Each of our named executive officers is entitled to acceleration of vesting in connection with a termination of employment upon or within one year after a change in control for the options the compensation committee granted in November 2011, effective December 5, 2011 and January 3, 2012.

Termination of Employment Not in Connection with or following a Change in Control

The following table sets forth the estimated potential benefits that our named executive officers would be entitled to receive upon their termination of employment with our company (other than a termination in connection with or following a change in control of the company) if the named executive officers' employment terminated on December 31, 2012. This table represents estimates only and does not necessarily reflect the actual amounts that would be paid to our named executive officers, which would only be known at the time that they become eligible for payment following their termination.

Termination of Employment Not In Connection With or Following Change in Control

<u>Name</u>	<u>Severance Payments (S)</u>	<u>Bonus Amount (S)</u>	<u>Value of Accelerated Vesting of Stock Options (S)(3)</u>	<u>Value of Continuation of Benefits (S)(1)</u>	<u>Total (S)</u>
Sudhir Agrawal, D. Phil. (2)	\$ 1,098,000	—	—	\$ 47,507	\$ 1,145,507
Louis J. Arcudi, III (4)	\$ 315,000	—	—	\$ 23,226	\$ 338,226
Timothy M. Sullivan, Ph.D.	—	—	—	—	—
Robert D. Arbeit, M.D.	—	—	—	—	—

- (1) This amount represents the estimated cost to us of continuing the named executive officer's healthcare, disability, life and dental insurance benefits for the full severance period applicable to such named executive officer based on our costs for such benefits at December 31, 2012.
- (2) Following the termination of Dr. Agrawal's employment by him for good reason or by us other than for death, disability or cause, Dr. Agrawal will be entitled to severance payments, a pro rata portion of his bonus for the prior year, if any, benefits continuation and acceleration of vesting of his equity awards to the extent such options or equity incentive awards would have vested had he continued to be an employee until the final day of the term of the agreement in effect immediately prior to such termination. Upon termination of Dr. Agrawal's employment due to death or disability, we have agreed to pay a pro rata portion of his bonus for the prior year and to accelerate the vesting of his equity awards to the extent such options or equity incentive awards would have vested had he continued to be an employee until the final day of the term of the agreement in effect immediately prior to such termination. See "Agreements with our Named Executive Officers" for further information about acceleration of vesting and severance payments in such circumstances.
- (3) Calculated by multiplying the number of shares subject to options for which vesting would be accelerated by the difference between \$0.89, the closing price of our common stock on December 31, 2012, and the per share exercise prices for such options. As of December 31, 2012, all of Dr. Agrawal's options had exercise prices that were higher than \$0.89 per share.
- (4) Severance payments and benefits continuation will only be paid to Mr. Arcudi following termination by us without cause. See "Agreements with our Named Executive Officers" for further information about our agreement with Mr. Arcudi.

Termination of Employment In Connection With or Following Change in Control

The following table sets forth the estimated potential benefits that our named executive officers would be entitled to receive upon their termination of employment with our company in connection with or following a change in control of the company if the change of control occurred on December 31, 2012 and the named executive officer's employment was immediately terminated. This table represents estimates only and does not necessarily reflect the actual amounts that would be paid to our named executive officers, which would only be known at the time that they become eligible for payment following their termination.

Termination of Employment In Connection With or Following Change in Control

Name	Severance Payments (\$)	Bonus Amount (\$)	Value of Accelerated Vesting of Stock Options (\$)(3)	Value of Continuation of Benefits (\$)(1)	Total (\$)
Sudhir Agrawal, D. Phil. (2)	\$ 1,098,000	—	—	\$ 47,507	\$ 1,145,507
Louis J. Arcudi, III (4)	\$ 315,000	—	—	\$ 23,226	\$ 338,226
Timothy M. Sullivan, Ph.D.	—	—	—	—	—
Robert D. Arbeit, M.D.	—	—	—	—	—

- (1) Represents the estimated cost to us of continuing the named executive officers' healthcare, disability, life and dental insurance benefits for the applicable severance period based on our costs for such benefits at December 31, 2012.
- (2) Following the termination of Dr. Agrawal's employment in connection with or following a change in control by him for good reason or by us other than for death, disability or cause, Dr. Agrawal will be entitled to a lump sum severance payment, a pro rata portion of his bonus for the prior year, benefits continuation and full acceleration of vesting of his option awards. See "Agreements with our Named Executive Officers" for further information about acceleration of vesting and severance payments in such circumstances.
- (3) Calculated by multiplying the number of shares subject to options for which vesting would be accelerated by the difference between \$0.89, the closing price of our common stock on December 31, 2012, and the per share exercise prices for such options. As of December 31, 2012, all of the options subject to acceleration granted to these individuals had an exercise price that was higher than \$0.89 per share.
- (4) Following the termination of Mr. Arcudi's employment in connection with or following a change in control by him for good reason or by us other than for death, disability or cause, Mr. Arcudi will be entitled to severance payments of his then current base salary and benefits continuation for a twelve-month period, payable in accordance with and at the times contemplated by our then current payroll practices.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Our compensation committee currently consists of Dr. MacCoss, Mr. El Zein, and Dr. Slater. No member of our compensation committee was at any time during 2012, or was formerly, an officer or employee of ours. No member of our compensation committee engaged in any related person transaction involving our company during 2012 other than Mr. El Zein. See "Transactions with Related Persons" for information about the terms of the transaction we engaged in with affiliates of Mr. El Zein. None of our executive officers has served as a director or member of the compensation committee (or other committee serving the same function as the compensation committee) of any other entity, while an executive officer of that other entity served as a director or member of our compensation committee.

COMPENSATION COMMITTEE REPORT

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with our management. Based on this review and discussion, the compensation committee recommended to our board of directors that the Compensation Discussion and Analysis be included in this Amendment.

By the compensation committee of the board of directors,

Malcolm MacCoss, Chairman
Youssef El Zein
Eve E. Slater

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

On January 31, 2013, we had 27,642,969 shares of common stock issued and outstanding, 424,242 shares of Series E convertible preferred stock, or Series E preferred stock, issued and outstanding and 1,124,260 shares of Series D redeemable convertible preferred stock, or Series D preferred stock, issued and outstanding. The following table sets forth information we know about the beneficial ownership of our common stock, our Series E preferred stock and our Series D preferred stock, as of January 31, 2013, by:

- each person known by us to own beneficially more than 5% of the outstanding shares of our common stock;
- each person known to us to beneficially own more than 5% of the outstanding shares of our Series E preferred stock
- each person known to us to beneficially own more than 5% of the outstanding shares of our Series D preferred stock
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information in the table below is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership of a person includes any shares as to which such person has the sole or shared voting power or investment power. In addition, under such rules, beneficial ownership of a person includes any shares that such person has the right to acquire within 60 days after January 31, 2012 through the conversion of any convertible security or the exercise of any stock option, warrant or other right. These shares, however, are not considered outstanding when computing the percentage ownership of each other person.

Unless otherwise indicated in the footnotes to the table below, each stockholder named in the table has sole investment and voting power (or shares such power with his or her spouse) with respect to the shares shown as beneficially owned by them. The inclusion of any shares deemed beneficially owned does not constitute an admission of beneficial ownership of such shares.

Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership of Common Stock	% of Common Stock Beneficially Owned	Amount and Nature of Beneficial Ownership of Series D Preferred Stock	% of Series D Preferred Stock Beneficially Owned	Amount and Nature of Beneficial Ownership of Series E Preferred Stock	% of Series E Preferred Stock Beneficially Owned	% of Combined Voting Power of Series D Preferred Stock and Common Stock ⁽²⁾
5% Stockholders							
Pillar Investment Entities c/o Pillar Invest Offshore SAL Starco Ctr Bloc B, 3rd Flr, Omar Daouk St. Beirut, M8 2020-3313	6,759,892 ⁽³⁾	19.99% ⁽³⁾	1,124,260 ⁽⁴⁾	100%	424,242 ⁽⁵⁾	100%	19.99% ⁽³⁾

Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership of Common Stock	% of Common Stock Beneficially Owned	Amount and Nature of Beneficial Ownership of Series D Preferred Stock	% of Series D Preferred Stock Beneficially Owned	Amount and Nature of Beneficial Ownership of Series E Preferred Stock	% of Series E Preferred Stock Beneficially Owned	% of Combined Voting Power of Series D Preferred Stock and Common Stock ⁽²⁾
Merck & Co., Inc.							
One Merck Drive Whitehouse Station, NJ 08889	1,818,182 ⁽⁶⁾	6.58%	—	—	—	—	5.38%
Senator Investment Group LP 1330							
Avenue of the Americas 26th Floor New York, NY 10019	1,370,215 ⁽⁷⁾	4.96%	—	—	—	—	4.05%
Directors and Named Executive Officers							
Youssef El Zein	6,759,892 ⁽⁸⁾	19.99% ⁽³⁾	1,124,260 ⁽⁹⁾	100%	424,242 ⁽¹⁰⁾	100%	19.99% ⁽³⁾
Sudhir Agrawal, D. Phil.	1,470,880 ⁽¹¹⁾	5.07%	—	—	—	—	*
Robert D. Arbeit, M.D.	157,339 ⁽¹²⁾	*	—	—	—	—	*
Louis J. Arcudi, III	348,925 ⁽¹³⁾	1.25%	—	—	—	—	*
C. Keith Hartley	134,300 ⁽¹⁴⁾	*	—	—	—	—	*
Robert W. Karr, M.D.	161,757 ⁽¹⁵⁾	*	—	—	—	—	*
Malcolm MacCoss, Ph.D.	44,924 ⁽¹⁶⁾	*	—	—	—	—	*
William S. Reardon	85,349 ⁽¹⁷⁾	*	—	—	—	—	*
Eve E. Slater	31,333 ⁽¹⁸⁾	*	—	—	—	—	*
Timothy M. Sullivan, Ph.D.	339,631 ⁽¹⁹⁾	1.21%	—	—	—	—	*
Abdul-Wahab Umari	2,500 ⁽²⁰⁾	*	—	—	—	—	*
All current directors and executive officers as a group (11 individuals)	9,536,830 ⁽²¹⁾	26.20%	1,124,260 ⁽⁴⁾	100%	424,242 ⁽⁵⁾	100%	20.66%

* Less than 1%

(1) Except as otherwise noted, the address for each person listed above is c/o Idera Pharmaceuticals, Inc., 167 Sidney Street, Cambridge, Massachusetts 02139.

-
- (2) The percentage of the combined voting power of the Series D preferred stock and the common stock is calculated by dividing (a) the sum of the total number of shares of common stock owned by the stockholder and the total number of shares of common stock then issuable upon conversion of the Series D preferred stock owned by the stockholder by (b) the sum of the total number of shares of common stock outstanding and the total number of shares of common stock then issuable upon conversion of the Series D preferred stock outstanding. The sum of the total number of shares of common stock outstanding and the total number of shares of common stock then issuable upon conversion of the Series D preferred stock outstanding as of January 31, 2013 was 33,816,760. As of January 31, 2013, the Series E preferred stock is nonvoting stock.
- (3) Consists of (i) 6,093,675 shares of common stock issuable upon conversion of 1,093,310 shares of Series D preferred stock held by Pillar I, (ii) 586,101 shares of common stock held directly by Mr. El Zein and (iii) 80,116 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013 held by Mr. El Zein. As a result of the application of the Conversion Cap, as described below in this footnote, the table above does not include the following as being beneficially owned by the Pillar Investment Entities: (a) 172,500 shares of common stock issuable upon conversion of 30,950 shares of Series D preferred stock held by Pillar I; (b) 424,242 shares of common stock issuable upon conversion of 8,484,840 shares of Series E preferred stock held by Pillar II; (c) 2,218,020 shares of common stock issuable upon conversion of 110,901 shares of Series E preferred stock held by Participations Besancon, or Besancon, and over which Pillar Invest Corporation has investment discretion, pursuant to an advisory agreement between Pillar Invest Corporation and Besancon, or the Advisory Agreement; (d) 6,266,820 shares of common stock issuable upon exercise of a warrant to purchase common stock held by Pillar II; (e) 2,218,020 shares of common stock issuable upon exercise of a warrant to purchase common stock held by Besancon and over which Pillar Invest Corporation has investment discretion pursuant to the Advisory Agreement; and (f) 2,810,650 shares of common stock issuable upon exercise of a warrant to purchase common stock held by Pillar I. Mr. El Zein is a director and controlling stockholder of Pillar Invest Corporation, which is the general partner of Pillar I and Pillar II, and is a limited partner of Pillar I and Pillar II. Mr. El Zein expressly disclaims beneficial ownership over shares held directly by Pillar I, Pillar II and indirectly by Pillar Invest Corporation, including the shares of Series E preferred stock and warrants issued in connection therewith held by Besancon, or the Besancon Securities. Pillar I and Pillar II expressly disclaim beneficial ownership of the Besancon Securities. Besancon is an investment fund having no affiliation with Mr. El Zein, Pillar I, Pillar II or Pillar Invest Corporation. The information in this footnote is based on a Schedule 13D/A filed with the SEC on November 16, 2012 and a Schedule 13D filed with the SEC on November 14, 2011. Pursuant to the terms of the Series D preferred stock and the warrants to purchase common stock issued in connection with the issuance of the Series D preferred stock, the Series E preferred stock and the warrants to purchase common stock issued in connection with the issuance of the Series E preferred stock, the shares of Series E preferred stock and Series D preferred stock cannot be converted by the holder thereof into shares of our common stock and the warrants issued in connection with Series E preferred stock and Series D preferred stock cannot be exercised by the holder thereof with respect to any portion of the shares, to the extent that such conversion or exercise would result in the Pillar Investment Entities beneficially owning more than 19.99% of (x) the number of shares of common stock outstanding or (y) the combined voting power of our securities outstanding immediately after giving effect to the issuance of shares of common stock issuable upon exercise of the Series E warrants and the Series D warrants. This limitation on conversion and exercise of the Series D preferred stock, Series E preferred stock and warrants issued in connection with the issuance of the Series D preferred stock and the Series E preferred stock is referred to in this footnote as the Conversion Cap. In addition, pursuant to the terms of the purchase agreements under which such securities were acquired, the purchasers have each agreed that for so long as such purchaser and its affiliates beneficially own more than 19.99% of our outstanding common stock, such purchase, and its affiliates will vote any shares held by them in excess of the number of shares equal to 19.99% of the outstanding common stock (including the shares of common stock issuable upon conversion of the Series E preferred stock and the Series D preferred stock) with respect to any matter put to a vote of the holders of common stock in the same manner and percentage as the holders of the common stock vote on such matter. See "Transactions with Related Persons" for further information about the Series E preferred stock and warrants issued in connection with the issuance of the Series E preferred stock and the terms of the purchase agreement between Pillar II and us and information about the Series D preferred stock and warrants issued in connection with the issuance of the Series D preferred stock and the terms of the purchase agreement between Pillar I and us.
- (4) Consists of shares of preferred stock held by Pillar I.
- (5) Consists of shares of preferred stock held by Pillar II and the preferred stock held by Besancon.
- (6) As reported on a Schedule 13G filed with the SEC on December 15, 2006.

-
- (7) As reported on a Schedule 13G filed with the SEC on February 25, 2013. Senator Investment Group LP also holds a warrant exercisable for 1,293,802 shares of common stock that are not included as beneficially owned by Senator Investment Group LP in the table above. The warrant may only be exercised so long as Senator Investment Group LP holds no more than 4.99% of the number of shares of common stock outstanding after such exercise. The limit may be increased to 9.99% upon no less than 61 days' notice to us. Senator Investment Group LP, a Delaware limited partnership, serves as investment manager to two Delaware limited partnership, four Cayman Islands limited partnerships, and a Cayman Islands company, collectively, the Funds, and as such, has investment discretion with respect to the Funds. Douglas Silverman, a United States citizen, and Alexander Klabin, a United States citizen, have control of a Delaware limited liability company that may be deemed to control Senator Investment Group LP. The partners of the Funds have the right to participate in the receipt of dividends from, or proceeds from the sale of, the securities reported herein held by the Funds in accordance with their respective ownership interests in the Funds. Senator Investment Group LP disclaims beneficial ownership of the securities.
 - (8) Consists of shares reported under footnote 3 this table above. Mr. El Zein is a director and controlling stockholder of Pillar Invest Corporation, which is the general partner of Pillar I and Pillar II, and is a limited partner of Pillar I and Pillar II. Accordingly, Mr. El Zein may be deemed to have sole power to direct the voting and disposition of the shares of common stock held directly by Pillar I and Pillar II and indirectly by Pillar Invest Corporation, including the Besancon Securities. Mr. El Zein expressly disclaims beneficial ownership over shares held directly by Pillar I, Pillar II and indirectly by Pillar Invest Corporation, including the Besancon Securities, except to the extent of his pecuniary interest therein, if any, by virtue of his ownership interest in Pillar Invest Corporation and his limited partnership interest in Pillar I and Pillar II.
 - (9) Consists of shares of preferred stock held by Pillar I. Mr. El Zein is a director and controlling stockholder of Pillar Invest Corporation, which is the general partner of Pillar I, and is a limited partner of Pillar I. Accordingly, Mr. El Zein may be deemed to have sole power to direct the voting and disposition of the shares of preferred stock held directly by Pillar I. Mr. El Zein expressly disclaims beneficial ownership of any shares of preferred stock held directly by Pillar I or indirectly by Pillar Invest Corporation.
 - (10) Consists of shares of preferred stock held by Pillar II. Mr. El Zein is a director and controlling stockholder of Pillar Invest Corporation, which is the general partner of Pillar II, and is a limited partner of Pillar II. Accordingly, Mr. El Zein may be deemed to have sole power to direct the voting and disposition of the shares of preferred stock held directly by Pillar II. Mr. El Zein expressly disclaims beneficial ownership of any shares of preferred stock held directly by Pillar II or indirectly by Pillar Invest Corporation, including the Besancon Securities.
 - (11) Includes 1,344,603 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (12) Includes 149,779 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (13) Includes 343,060 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (14) Includes 80,116 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013. Also includes 2,434 shares of common stock held in a Defined Benefit Pension Plan, owned and controlled solely by Mr. Hartley.
 - (15) Includes 549 shares of common stock held by the Robert W. Karr Revocable Trust. Dr. Karr disclaims beneficial ownership of all shares held in this trust. Also includes 161,208 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (16) Includes 41,833 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (17) Includes 80,116 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
 - (18) Consists of shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.

- (19) Includes 314,717 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
- (20) Includes 2,500 shares of common stock subject to outstanding stock options that are exercisable within 60 days after January 31, 2013.
- (21) Includes 2,549,365 shares of common stock subject to outstanding stock options held by the directors and executive officers as a group that are exercisable within 60 days after January 31, 2013 and shares reported in clauses (i) and (ii) of the first sentence of footnote 3 to this table above.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information about our common stock that may be issued upon exercise of options and warrants under all of our equity compensation plans as of December 31, 2012.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options and Warrants (a)	Weighted-Average Exercise Price of Outstanding Options and Warrants (b)	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by stockholders(1)	5,657,256	\$ 4.96	2,413,469
Equity compensation plans not approved by stockholders	—	—	—
Total	5,657,256	\$ 4.96	2,413,469

(1) Consists of our:

- 1995 Employee Stock Purchase Plan;
- 1995 Director Stock Option Plan;
- 1997 Stock Incentive Plan;
- 2005 Stock Incentive Plan; and
- 2008 Stock Incentive Plan.

Shares are available for future issuance only under our 1995 Employee Stock Purchase Plan and our 2008 Stock Incentive Plan.

Item 13. *Certain Relationships and Related Transactions, and Director Independence.*

TRANSACTIONS WITH RELATED PERSONS

Since January 1, 2012, except as discussed below regarding transactions with Pillar Pharmaceuticals I, L.P., or Pillar I, and Pillar Pharmaceuticals II, L.P., or Pillar II, which are currently greater than 5% stockholders, and Mr. El Zein, and Mr. Umari, whom are currently members of our board of directors and affiliates of Pillar I and Pillar II, we have not entered into or engaged in any related party transactions, as defined by the SEC, with our directors, officers and stockholders who beneficially owned more than 5% of our outstanding common stock, as well as affiliates or immediate family members of those directors, officers and stockholders. We believe that the terms of our transactions described below were no less favorable than those that we could have obtained from unaffiliated third parties.

Series E Preferred Stock and Warrant Financing

In November 2012, we entered into a Convertible Preferred Stock and Warrant Purchase Agreement, or Series E Purchase Agreement, with Pillar II and a second purchaser, which we collectively refer to as the Series E purchasers. Pillar II is an investment partnership managed by two of our directors and one of our significant stockholders. Mr. El Zein, a member of our board of directors, is a director and controlling stockholder of Pillar Invest, which is the general partner of Pillar II, and is a limited partner of Pillar II. Pillar Invest also entered into an Advisory Agreement with the second purchaser of our Series E convertible preferred stock, or Series E preferred stock, and related warrants to purchase shares of our common stock, or Series E warrants, pursuant to which Pillar Invest has investment discretion over the shares purchased by such second purchaser. Mr. El Zein has voting and investment control over the securities beneficially owned by the Series E purchasers. In addition, Abdul-Wahab Umari, also a member of our board of directors, is a managing partner of Pillar Invest.

Under the Series E Purchase Agreement, we issued and sold to the Series E purchasers, for an aggregate purchase price of approximately \$7.0 million, 424,242 shares of Series E preferred stock and Series E warrants to purchase up to 8,484,840 shares of common stock. The shares of Series E preferred stock are convertible, subject to limitations, into an aggregate of 8,484,840 shares of common stock at a conversion price of \$0.70 per share. No Series E preferred stockholder may convert its shares to the extent such conversion would result in the holder and its affiliates beneficially owning more than 19.99% of the common stock outstanding. The exercise price of the warrants is \$0.70 per share. The warrants to purchase common stock are exercisable immediately, and will expire if not exercised on or prior to November 9, 2017.

We have agreed to pay to the Series E preferred stockholders quarterly dividends payable in cash in arrears at the rate of 4.6% per annum with the first dividend payment being due on March 31, 2013. Under the terms of the Convertible Preferred Stock and Warrant Purchase Agreement we entered into in November 2011, or the Series D Purchase Agreement, any dividends that we pay to Series E preferred stockholders will also be paid to Series D preferred stockholders on an as-converted to common stock basis. We have agreed that, at our 2013 annual meeting of stockholders, we will propose an amendment to the Certificate of Designations, Preferences and Rights of Series D Preferred Stock, or Series D Certificate of Designations, to, among other things, modify the terms of the Series D redeemable convertible preferred stock, or Series D preferred stock, that require the payment of dividends to Series D preferred stockholders upon payment of dividends to Series E preferred stockholders. If such amendment is approved by our stockholders, the Series E preferred stockholders would become entitled to receive dividends payable in cash quarterly in arrears at the rate of 8% per annum and the Series D preferred stockholders would cease to be entitled to corresponding dividends. If such amendment is submitted to our stockholders and it is not approved, the Series E preferred stockholders will no longer be entitled to receive dividends.

Under the terms of the Series E Purchase Agreement, we granted Pillar II participation rights in future financings. In addition, we agreed to use our best efforts to file a preliminary proxy statement for our 2013 annual meeting of stockholders that will, among other things, seek approval from our stockholders of the following matters:

- the issuance and sale by the Company to Pillar II (together with all prior issuances and sales to Pillar I) of a number of shares of common stock (including securities converted into or exercisable for common stock) that is greater than 19.99% of the outstanding common stock or outstanding voting power of the Company after such issuance and sale in accordance with Nasdaq Listing Rule 5635(b), or the Nasdaq Proposal;
- an amendment to our restated certificate of incorporation and bylaws, as necessary, to eliminate the classification of our board of directors; and
- an amendment to the Series D Certificate of Designations for our Series D preferred stock to modify the dividend provisions of the Series D Certificate of Designations so that dividends on the Series E preferred stock are not required to be paid to the Series D preferred stockholders and to conform the beneficial ownership limitations applicable to the conversion of the Series D preferred stock to the beneficial ownership limitations applicable to the conversion of the Series E preferred stock.

Also under the terms of the Series E Purchase Agreement, each Series E preferred stockholder has agreed:

- for so long as the Series E preferred stockholder and its affiliates beneficially own more than 19.99% (prior to the date the stockholders of the Company approve the Nasdaq Proposal) or 25% (effective upon the date that the stockholders of the Company approve the Nasdaq Proposal) of the outstanding common stock, that the Series E preferred stockholder and its affiliates will vote any shares held by them in excess of the number of shares equal to 19.99% or 25%, as applicable, of the outstanding common stock (including the shares of common stock issuable upon conversion or exercise of securities that are convertible into or exercisable for shares of common stock held by such Series E preferred stockholder and its affiliates) with respect to any matter put to a vote of the holders of common stock in the same manner and percentage as the holders of the common stock (other than the Series E preferred stockholder) vote on such matter;
- to certain restrictions on the transfer of any securities issued to such Series E preferred stockholder (including securities convertible into or exercisable for common stock) pursuant to the convertible preferred stock and warrant purchase agreement including to not sell or transfer any such securities in one or a series of transactions if such transfer would, in the aggregate, result in the transfer of more than 5% of the then outstanding combined voting power of the outstanding securities of the Company (excluding from this restriction certain transfers to permitted transferees or in connection with an underwritten public offering by the Company that has been approved by our board of directors); and
- to be subject to a standstill provision that continues for so long as such Series E preferred stockholder and its affiliates beneficially own more than 15% of the outstanding common stock of the Company.

After the later of November 9, 2014 and the date that no shares of Series D preferred stock remain outstanding, we may redeem all or a portion of the Series E preferred stock for a cash payment equal to the \$14.00 original Series E preferred stock issue price per share plus any accrued or declared but unpaid dividends thereon following notice to the Series E preferred stockholders if the closing price of our common stock for 20 or more trading days in a period of 30 consecutive trading days is greater than or equal to 400% of the \$0.70 Series E preferred stock conversion price. We may not redeem any shares of Series E preferred stock from a Series E preferred stockholder that cannot convert such shares of Series E preferred stock into common stock as a result of the beneficial ownership limitations described above. In such event, we may redeem such nonredeemable shares for a cash payment equal to the greater of the 20 consecutive trading day average closing price per share of the common stock ending on the trading day immediately prior to redemption date plus any dividends accrued or declared but unpaid thereon and the Series E conversion price plus any dividends accrued or declared but unpaid thereon. After November 9, 2014, we also may redeem the Series E warrants for \$0.01 per share of common stock issuable on exercise of the warrants to purchase shares of our common stock issued in connection with the Series D Purchase Agreement following notice to the Series E purchasers if the closing price of the common stock for 20 or more trading days in a period of 30 consecutive trading days is greater than or equal to \$2.80 per share.

In connection with the Series E Purchase Agreement, we filed a registration statement that became effective on January 17, 2013, registering the resale of the shares of common stock issuable upon conversion of the Series E preferred stock and the shares of common stock issuable upon exercise of the Series E warrants.

April 2013 Pillar Agreement

In April 2013, we entered into an agreement with Pillar I and Pillar II, together the Pillar Entities, which we refer to as the April 2013 Pillar Agreement. Under the April 2013 Pillar Agreement, Pillar I has irrevocably agreed to waive and not exercise the rights, powers, preferences and other terms of the Series D preferred stock under Section 6 of the Series D Certificate of Designations, including without limitation the right to require us to purchase all or any portion of the shares of our Series D preferred stock at a price equal to the original Series D preferred stock purchase price per share plus all accrued or declared but unpaid dividends thereon upon the occurrence of specified fundamental changes such as mergers, consolidations, business combinations, stock purchases or similar transactions resulting in a person or group unaffiliated with any holder of Series D preferred stock owning 66.67% or more of the outstanding voting securities of the Company or successor entity.

Under the April 2013 Pillar Agreement, we and the Pillar Entities have agreed, among other things:

- to an amendment to the Series D Certificate of Designations for our Series D preferred stock that would:
 - modify the dividend provisions of the Series D Certificate of Designations to change the date after which we may elect to pay dividends in shares of our common stock from December 31, 2014 to October 1, 2013, and to allow for the payment of such dividends in shares of a to-be-created new series of non-voting

preferred stock in the event that payment of such dividends may not be made in shares of our common stock as a result of the application of the beneficial ownership and voting power limitations set forth the Series D Certificate of Designations; and

- in connection with the waiver of the right to require us to purchase the Series D preferred stock upon the occurrence of specified fundamental changes, to modify the Series D Certificate of Designations to provide, in the event of a sale of our company, for the distribution of any assets that remain available for distribution to our stockholders, after payment to the holders of our Series A convertible preferred stock and any other class of our capital stock that ranks senior to our Series D preferred stock, to the holders of our Series D preferred stock on a pro rata basis with the holders of our common stock, Series E preferred stock and such new series of non-voting preferred stock; and
- to an amendment to the Certificate of Designations, Preferences and Rights of Series E Preferred Stock, or the Series E Certificate of Designations, that would:
 - modify the dividend provisions of the Series E Certificate of Designations to allow for the payment of dividends in shares of our common stock commencing October 1, 2013; and
 - allow for the payment of dividends in shares of a to-be-created new series of non-voting preferred stock in the event that payment of such dividends may not be made in shares of our common stock as a result of the application of the beneficial ownership and voting power limitations set forth in the Series E Certificate of Designations.

In addition, we have agreed to seek approval from our stockholders at our 2013 annual meeting of stockholders of amendments to the Series D Certificate of Designations and Series E Certificate of Designations to effect these changes to the dividend provisions of our Series D preferred stock and Series E preferred stock, the redemption rights of the holders of our Series D preferred stock and the rights of the holders of our Series D preferred stock to distributions in the event of a sale of our company. Each Pillar Entity has agreed:

- to vote, and to cause its affiliates to vote, all shares of our voting stock held by such Pillar Entity or its affiliates, and over which such Pillar Entity or its affiliates has the power to vote, in favor of such amendments; and
- not to, and to cause its affiliates not to, sell or transfer any shares of our common stock, Series D preferred stock or Series E preferred stock held by such Pillar Entity or its affiliates to any person, entity or group unless such proposed transferee agrees in a written instrument executed by such transferee, the applicable Pillar Entity and us to take and hold such securities subject to, among other things, the April 2013 Pillar Agreement and to be bound by the terms of the April 2013 Pillar Agreement, including the waiver of rights, voting agreements and restrictions on transfer set forth therein.

Under the April 2013 Pillar Agreement, in consideration of the agreements of the Pillar Entities under the April 2013 Pillar Agreement and the delivery of the waiver by Pillar I, and for no additional cash consideration, we have agreed to issue to Pillar I warrants, the Pillar I Warrants, to purchase up to 1,000,000 shares of our common stock. The Pillar I Warrants will have an exercise price per share equal to the greater of (a) \$0.61 and (b) to the extent that warrants to purchase shares of our common stock are issued in the qualified financing, the per share exercise price of the warrants issued in such qualified financing, which would include the exercise price of any warrants issued in this offering to the extent that this offering is deemed to be a qualified financing. The Pillar I Warrants are exercisable immediately, and will expire if not exercised on or prior to the fifth anniversary from the date of issuance. The Pillar I Warrants provide that, after the second anniversary of the date of issuance, we may redeem the Pillar I Warrants for \$0.01 per share of common stock issuable on exercise of the Pillar I Warrants following notice to the holder thereof if the closing price of our common stock for 20 or more trading days in a period of 30 consecutive trading days is greater than or equal to \$2.80 per share.

The April 2013 Pillar Agreement, including our obligation to issue the Pillar I Warrants, will become effective upon the consummation of a qualified financing, which would include the consummation of this offering. The April 2013 Pillar Agreement will terminate in the event that a qualified financing is not consummated by October 1, 2013. Under the terms of the April 2013 Pillar Agreement, a qualified financing is defined as the issuance and sale of our equity securities from and after the date of the April 2013 Pillar Agreement in one or more closings resulting in aggregate gross proceeds to us of at least \$12.5 million.

In addition, we agreed to file a registration statement to register the resale of the shares of common stock issuable upon exercise of the Pillar I Warrants.

Policies and Procedures for Related Person Transactions

Our board of directors is committed to upholding the highest legal and ethical conduct in fulfilling its responsibilities and recognizes that related party transactions can present a heightened risk of potential or actual conflicts of interest. Accordingly, as a general matter, it is our preference to avoid related party transactions.

In accordance with our audit committee charter, members of the audit committee, all of whom are independent directors, review and approve all related party transactions for which approval is required under applicable laws or regulations, including SEC and the Nasdaq Stock Market rules. Current SEC rules define a related party transaction to include any transaction, arrangement or relationship in which we are a participant and the amount involved exceeds \$120,000, and in which any of the following persons has or will have a direct or indirect interest:

- our executive officers, directors or director nominees;
- any person who is known to be the beneficial owner of more than 5% of our common stock;
- any person who is an immediate family member, as defined under Item 404 of Regulation S-K, of any of our executive officers, directors or director nominees or beneficial owners of more than 5% of our common stock; or
- any firm, corporation or other entity in which any of the foregoing persons is employed or is a partner or principal or in a similar position or in which such person, together with any other of the foregoing persons, has a 5% or greater beneficial ownership interest.

In addition, the audit committee reviews and investigates any matters pertaining to the integrity of management, including conflicts of interest and adherence to our code of business conduct and ethics. Under our code of business conduct and ethics, our directors, officers and employees are expected to avoid any relationship, influence or activity that would cause or even appear to cause a conflict of interest. Under our code of business conduct and ethics, a director is required to promptly disclose to our board of directors any potential or actual conflict of interest involving him or her. In accordance with our code of business conduct and ethics, the board of directors will determine an appropriate resolution on a case-by-case basis. All directors must recuse themselves from any discussion or decision affecting their personal, business or professional interests.

DIRECTOR INDEPENDENCE

Under applicable NASDAQ rules, a director will only qualify as an “independent director” if, in the opinion of our board of directors, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Our board of directors has determined that Mr. Hartley, Dr. Karr, Dr. MacCoss, Mr. Reardon, Dr. Slater, Mr. Umari and Mr. El Zein and all of the members of each of the audit, compensation and nominating and corporate governance committees are independent as defined under applicable NASDAQ rules including, in the case of all members of the audit committee, the independence requirements contemplated by Rule 10A-3 under the Securities Exchange Act of 1934, as amended.

Item 14. *Principal Accountant Fees and Services.*

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FEES

We paid Ernst & Young LLP a total of \$338,325 for professional services rendered for the year ended December 31, 2012 and \$372,500 for professional services rendered for the year ended December 31, 2011. The following table provides information about these fees.

<u>Fee Category</u>	<u>2012</u>	<u>2011</u>
Audit Fees	\$ 314,000	\$ 351,750
Audit-Related Fees	—	—
Tax Fees	24,325	20,750
All Other Fees	—	—
Total Fees	\$ 338,325	\$ 372,500

Audit Fees

Audit fees consist of fees for the audit of our financial statements, the audit of our internal control over financial reporting, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with statutory and regulatory filings or engagements.

Audit-Related Fees

Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of audits and reviews of our financial statements that are not reported under “Audit Fees.” These services include consultations regarding internal controls, financial accounting and reporting standards.

Tax Fees

Tax fees consist of fees for tax compliance, tax advice and tax planning services. Tax compliance services, which relate to preparation of tax returns, accounted for \$20,000 of the total tax fees billed in 2012 and 2011. Tax advice and tax planning services relate to consultations on our net operating loss carry forwards, collaboration agreements and stock option exercises.

All Other Fees

Ernst & Young LLP did not collect fees for any other services for 2012 or 2011.

Our audit committee believes that the non-audit services described above did not compromise Ernst & Young LLP’s independence. Our audit committee charter, which you can find by clicking “Investors” and “Corporate Governance” on our website, www.iderapharma.com, requires that all proposals to engage Ernst & Young LLP for services, and all proposed fees for these services, be submitted to the audit committee for approval before Ernst & Young LLP may provide the services.

Pre-Approval Policies and Procedures

Our audit committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our registered public accounting firm. This policy generally provides that we will not engage our registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by the audit committee or the engagement is entered into pursuant to the pre-approval procedures described below.

From time to time, the audit committee may pre-approve specified types of services that are expected to be provided to us by our registered public accounting firm during the next 12 months. Any such pre-approval is detailed as to the particular service or type of services to be provided and is also generally subject to a maximum dollar amount. All of the services described above under the headings “Audit-Related Fees,” “Tax Fees” and “All Other Fees” were pre-approved by our audit committee.

PART IV.

Item 15. Exhibits and Financial Statement Schedules.

(a) *Financial Statements and Schedules.*

The Consolidated Financial Statements and notes thereto, and schedules, required to be filed in our Annual Report on Form 10-K are included in the Original Form 10-K Filing.

(b) *Exhibits.*

31.3 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, by Sudhir Agrawal, Chief Executive Officer, President and Chairman of the Board of Directors

31.4 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, by Louis J. Arcudi, III, Chief Financial Officer, Treasurer and Secretary

The Exhibits required to be filed in our Annual Report on Form 10-K are included in the Original Form 10-K Filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 30th day of April 2013.

Idera Pharmaceuticals, Inc.

By: _____ /s/ SUDHIR AGRAWAL

Sudhir Agrawal
*Chairman, President and
Chief Executive Officer*

CERTIFICATIONS

I, Sudhir Agrawal, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Idera Pharmaceuticals, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

/s/ SUDHIR AGRAWAL

Sudhir Agrawal
Chairman, President and Chief Executive Officer

Date: April 30, 2013

CERTIFICATIONS

I, Louis J. Arcudi, III, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Idera Pharmaceuticals, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

/s/ Louis J. Arcudi, III

Louis J. Arcudi, III
Chief Financial Officer, Treasurer and Secretary

Date: April 30, 2013