UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

(Amendment No. 1)

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

For the fiscal year ended December 31, 2016

OR

• TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

to

For the transition period from

Commission File Number 001-33389

VIVUS, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

900 E. Hamilton Avenue, Suite 550 Campbell, California (Address of principal executive office) 94-3136179 (IRS employer identification number)

> **95008** (Zip Code)

Name of Each Exchange on Which Registered

The NASDAQ Global Select Market

Registrant's telephone number, including area code: (650) 934-5200

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

Title of Each Class

Common Stock, \$.001 Par Value (Title of class)

Preferred Share Purchase Rights (Title of class)

> 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 o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o 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 such filing requirements for the past 90 days. Yes 🛛 No o

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 o

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 Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

The aggregate market value of the common equity held by non-affiliates of the Registrant as of June 30, 2016, totaled approximately \$116,562,897 based on the closing stock price as reported by the NASDAQ Global Select Market.

As of April 14, 2017, there were 105,643,606 shares of the Registrant's common stock, \$0.001 par value per share, outstanding.

Document Description

DOCUMENTS INCORPORATED BY REFERENCE

None.

10-K part

EXPLANATORY NOTE

This Amendment No. 1 to Form 10-K, or this Amendment, amends the Annual Report on Form 10-K for the fiscal year ended December 31, 2016 originally filed on March 8, 2017, or the Original Filing, by VIVUS, Inc., a Delaware corporation. We are filing this Amendment to present the information required by Items 10, 11, 12, 13 and 14 of Part III of Form 10-K because a definitive proxy statement containing such information will not be filed within 120 days after the end of our fiscal year covered by the Original Filing.

This Amendment amends and restates in its entirety Items 10, 11, 12, 13 and 14 of Part III and amends Part IV of the Original Filing. Except as expressly set forth herein, this Amendment does not reflect events occurring after the date of the Original 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 Filing and our other filings with the Securities and Exchange Commission, or SEC.

When we refer to "we," "our," "us," the "Company" or "VIVUS" in this document, we mean the current Delaware corporation, or VIVUS, Inc., and its California predecessor, as well as all of our consolidated subsidiaries.

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In VIVUS's filings with the SEC, information is sometimes "incorporated by reference." This means that we refer you to information previously filed with the SEC that should be considered as part of the particular filing. As provided under SEC regulations, the "Compensation Committee Report" contained in this Amendment specifically is not incorporated by reference into any other filings with the SEC and shall not be deemed to be "filed" with the SEC. In addition, this Amendment includes a website address. This website address is intended to provide inactive, textual references only. The information on this website is not part of this Amendment.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Our Executive Officers

The following table and the biographical information that follows it set forth information as of April 14, 2017 regarding our executive officers:

Name	Age	Position
Seth H. Z. Fischer	60	Chief Executive Officer and Director
Mark K. Oki	48	Chief Financial Officer and Chief Accounting Officer
John L. Slebir	51	Senior Vice President, Business Development and
		General Counsel and Secretary
Santosh T. Varghese, M.D.	46	Chief Medical Officer

The biographical information of Mr. Fischer is set forth below under "Our Directors."

Mark K. Oki has served as our Chief Financial Officer and Chief Accounting Officer since October 2015. Prior to this, Mr. Oki held the following positions at Alexza Pharmaceuticals, Inc., a publicly traded pharmaceutical company: Senior Vice President, Finance and Chief Financial Officer from July 2012 until October 2015, Principal Accounting Officer from May 2010 until October 2015, Principal Financial Officer and Secretary from December 2011 until October 2015, Vice President, Finance and Controller from February 2010 until July 2012 and Controller from April 2006 until February 2010. From June 2001 until April 2006, he served as the Controller of Pharmacyclics, Inc., a publicly traded development stage pharmaceutical company. From 1998 until 2001, Mr. Oki held several positions at Incyte Genomics, Inc., now Incyte Corporation, a publicly traded company, including most recently as Assistant Controller. From 1992 until 1997, he held several positions at Deloitte & Touche LLP, a public accounting firm. Mr. Oki holds a B.S. in Business Administration with a concentration in Accounting from San Jose State University.

John L. Slebir has served as our Senior Vice President, Business Development and General Counsel since January 2014, and, since June 2012, he also has served as our Secretary. From June 2011 until January 2014, Mr. Slebir served as our Vice President, Business Development and General Counsel, from January 2011 until June 2011, he served as our Vice President, General Counsel, and, from September 2009 until January 2011, he served as our General Counsel on a part-time basis. From March 1999 until January 2011, Mr. Slebir served as an attorney at Wilson Sonsini Goodrich & Rosati, P.C., specializing in corporate securities and corporate governance. Prior to joining Wilson Sonsini Goodrich & Rosati, P.C., Mr. Slebir was an attorney at two prominent Bay Area law firms specialized in insurance and sporting equipment defense litigation. Mr. Slebir holds a B.A. in Communications from San Diego State University and a J.D. from Santa Clara University School of Law.

Santosh T. Varghese, M.D. has served as our Chief Medical Officer since January 2016. Dr. Varghese served as our Vice President, Medical & Regulatory Affairs, Pharmacovigilance, and QA from October 2013 until December 2015, as our Vice President, Head of Medical Affairs, Pharmacovigilance, and Regulatory Compliance from July 2013 until October 2013, as our Vice President, Head of Medical Affairs and Pharmacovigilance from April 2012 until July 2013, and as our Vice President, Head of Medical Affairs from March 2012 until April 2012. Prior to this, Dr. Varghese was Senior Vice President, Medical Affairs at Elan Pharmaceuticals, a biopharmaceutical company, from January 2011 until March 2012. From April 2010 until January 2011, Dr. Varghese served as an executive consultant in the pharmaceutical industry for medical education and pharmaceutical companies. From June 2008 until April 2010, he was Vice President Primary Care & Cardiovascular in Global Medical Affairs at Schering-Plough Corporation (now Merck & Co.), a pharmaceutical

company, in addition to other senior roles at Schering-Plough Corporation from May 2006 until June 2008. From November 2000 until May 2006, he held senior roles at Aventis and Sanofi-Aventis (now Sanofi SA), a pharmaceutical company. Dr. Varghese previously served on the board of directors of the American Lung Association—New York, and was an Adjunct Associate Professor at Touro University College of Medicine (now New York Medical College). Dr. Varghese is the co-author of abstracts and journal publications in multiple therapeutic areas. Dr. Varghese holds a B.S. in Biology from Pennsylvania State University and an M.D. from St. George's University School of Medicine. He completed his medical training in the Caribbean, United States, and United Kingdom.

Our Directors

Our board of directors, or the Board, currently consists of six directors.

The following table and the biographical information that follows it set forth information as of April 14, 2017 regarding our Board:

Beca	arst ame a ector
	2013
David Y. Norton(1)(3) 65 Chairman of the Board of Directors and Director	2013
Jorge Plutzky, M.D. 58 Director	2013
Eric W. Roberts(2)(3) 53 Director	2015
Herman Rosenman(1)(2) 69 Director	2013
Allan L. Shaw(1)(2) 53 Director	2015

(1) Member of the Audit Committee of the Board

(2) Member of the Compensation Committee of the Board

(3) Member of the Nominating and Governance Committee of the Board

Seth H. Z. Fischer has served as the Chief Executive Officer and as a director of the Company since September 3, 2013. Mr. Fischer served in positions of increasing responsibility with Johnson & Johnson, a public healthcare company, from 1983 until his retirement in 2012. Most recently, Mr. Fischer served as Company Group Chairman, Johnson & Johnson, and Worldwide Franchise Chairman, Cordis Corporation, from 2008 to 2012, which included responsibility for Cordis and Biosense Webster, and as Company Group Chairman, North America Pharmaceuticals from 2004 to 2007, which included responsibility for Ortho-McNeil Pharmaceuticals, Janssen and Scios. Prior to this position, Mr. Fischer served as President of Ortho-McNeil Pharmaceuticals from 2000 to 2004, with his operating responsibilities encompassing the commercialization of products in multiple therapeutic categories including Topamax® for epilepsy and migraine and products in the analgesic, anti-infective, cardiovascular, neurologic, psychiatric and women's health areas. Mr. Fischer has served on the board of BioSig Technologies, Inc., a public medical device company, since 2013. He has also served on the board of Agile Therapeutics, Inc., a public pharmaceuticals, Inc., a public biopharmaceutical company, since September 2016. From April 2013 to September 2013, Mr. Fischer served on the board of Trius Therapeutics, Inc., a public pharmaceutical company, until it was acquired by Cubist Pharmaceuticals. Mr. Fischer holds a Bachelor of General Studies from Ohio University and served as a captain in the U.S. Air Force.

Mr. Fischer's prior extensive executive level operational experience at Johnson & Johnson brings essential experience to the Board needed for strategic planning, product development and commercialization and operations.



David Y. Norton has served as a director of the Company since July 19, 2013. From February 2012 until July 2012, Mr. Norton served as Interim CEO of Savient Pharmaceuticals Inc., a pharmaceutical company that filed for Chapter 11 bankruptcy in October 2013. Until his retirement in September 2011, Mr. Norton was Company Group Chairman, Global Pharmaceuticals for Johnson & Johnson, a public healthcare company. In this position he was responsible for leading and developing the strategic growth agenda, including the strategy for licensing, acquisitions and divestments, and ensuring alignment with its global strategic functions, research and development and commercial organizations. Mr. Norton began his Johnson & Johnson career in 1979, and held a number of positions at the company, including Company Group Chairman, Worldwide Commercial and Operations for the CNS, Internal Medicine franchise from 2006 to 2009, Company Group Chairman for the pharmaceutical businesses in Europe, the Middle East and Africa from 2004 to 2006, and Company Group Chairman for the pharmaceutical businesses in Europe, the Middle East and Africa from 2004 to 2006, and Company Group Chairman for the pharmaceutical businesses in Corton has served as a director since February 2015 and as Chairman of the Board since May 2016 of INC Research Holdings, Inc., a public global contract research organization. He also serves as a director of the Global Alliance for TB Drug Development, a non-profit organization dedicated to the discovery and development of new, faster-acting and affordable tuberculosis medicines, and a member and previous Chairman of the board of directors of the American Foundation for Suicide Prevention, a non-profit organization exclusively dedicated to understanding and preventing suicide. He previously served as a director of Savient Pharmaceuticals Inc. from October 2011 until December 2013, a Senior Advisor to Tapestry Networks, a member of the Australian Pharmaceutical Manufacturers Association. Mr. Norton is a graduate of Con

Mr. Norton's qualifications as director include his extensive global commercial experience in the pharmaceutical and biotechnology industry and his experience serving on several boards of directors, including as Chairman of the board of a public pharmaceutical company.

Jorge Plutzky, M.D. has served as a director of the Company since May 9, 2013. Since 1996, Dr. Plutzky has served as the Director of The Vascular Disease Prevention Program, which includes the Lipid/Prevention Clinic, in the Cardiovascular Medicine Division at Brigham and Women's Hospital, where he is also Director of Preventive Cardiology. Since 1995, he has been on the faculty at Harvard Medical School and has directed a basic science laboratory focused on transcriptional mechanisms involved in adipogenesis, lipid metabolism, and diabetes, and their relationship to inflammation and atherosclerosis. Throughout his career, Dr. Plutzky has also been involved in translational clinical studies investigating links between metabolic disorders and cardiovascular disease. Dr. Plutzky has been a member of the scientific advisory boards of the Sarnoff Cardiovascular Research Foundation since 2009 and Ember Therapeutics since 2012. Dr. Plutzky has been elected to the American Society for Clinical Investigation and is a Fellow of the American College of Cardiology. Dr. Plutzky's papers have appeared in journals that include *Science, PNAS, Diabetes, Lancet, Annals of Internal Medicine,* and *Nature Medicine.* Dr. Plutzky has been involved with the U.S. Food and Drug Administration, serving both as a member of the Endocrinologic and Metabolic Drugs Advisory Committee and in advising and presenting for new drug application sponsors. He has been involved with both the American Heart Association and the American Diabetes Association. Dr. Plutzky has been recognized with the Eugene Braunwald Teaching Award, the University of Cologne's Klenk Lecture, Vanderbilt University's Rabin Lecture, Northwestern University of Virginia, where he was an Echols School's Tucker Collins Lecture. Dr. Plutzky has served on the board of directors of Novelion Therapeutics Inc. (which acquired Aegerion Pharmaceuticals, Inc.), a publicly traded biopharmaceutical company, since April 2015. Dr. Plutzky holds a B.A. from the University of Virginia, w

Dr. Plutzky's clinical background, medical knowledge, and science expertise in the prevention and treatment of cardiometabolic disease brings valuable and unique insight to the Board as evaluation, development and commercialization of our current and potential future products proceed.

Eric W. Roberts has served as a director of the Company since September 15, 2015. Since January 2012, Mr. Roberts has been a founding Managing Director of Valence Life Sciences, LLC, a life sciences venture capital firm. From 2004 to 2012, Mr. Roberts was a founding Managing Director of Caxton Advantage Venture Partners, an investment firm. From 1986 to 2004, Mr. Roberts served in a variety of roles as an investment banker, including as Managing Director, Partner and Founder of the Life Sciences Department at Dillon, Read & Co. Inc., an investment bank which merged to become UBS AG, and Managing Director and Co-Head of the Global Healthcare Investment Banking Group at Lehman Brothers, a former global services financial firm. Mr. Roberts currently serves on the board of directors of Invuity, Inc., a publicly traded medical technology company. He also served on the board of directors of Gemin X Pharmaceuticals, Inc., a biotechnology company, from 2007 through its sale to Cephalon, Inc. (now Teva Pharmaceutical Industries Ltd.) in 2011. Mr. Roberts holds a B.S. in economics from the Wharton School of the University of Pennsylvania.

Mr. Roberts' qualifications as a director include his extensive experience as an investment banker and venture capitalist in the healthcare industry and his broad healthcare industry knowledge.

Herman Rosenman has served as a director of the Company since July 19, 2013. Mr. Rosenman was Chief Financial Officer of Natera, Inc., a publicly traded diagnostics company, from February 2014 to January 2017. Prior to this, Mr. Rosenman was Senior Vice President, Finance and Chief Financial Officer of Gen-Probe, Inc. (currently, Hologic, Inc.), a molecular diagnostic company, from June 2001 to October 2012. Prior to joining Gen-Probe in 2001, Mr. Rosenman was President and Chief Executive Officer of Ultra Acquisition Corp., a retail chain and consumer products manufacturer, from 1997 to 2000. In addition, he served as President and Chief Executive Officer of RadNet Management, Inc., a large healthcare provider, from 1994 to 1997, and as Executive Vice President and Chief Financial Officer for Rexene Corp., a Fortune 1000 company in the petrochemicals industry. Mr. Rosenman was previously a partner at Coopers & Lybrand (currently, PricewaterhouseCoopers LLP), where he served numerous Fortune 1,000 clients, principally in the pharmaceuticals and telecommunications industries. Mr. Rosenman currently serves on the board of directors of Natera, Inc., a publicly traded diagnostics company, and Oxford Immunotec Global PLC, a publicly traded diagnostics company. Mr. Rosenman also served on the board of directors of Discovery Partners International, Inc., from 2003 until its reverse-merger into Infinity Pharmaceuticals, Inc. in 2006, and thereafter Infinity Pharmaceuticals, Inc., where he served until 2007, as well as on the boards of directors of ARYx Therapeutics, Inc., from which he resigned in 2011, Emphasys Medical, Inc. and Medistem, Inc. (acquired by Intrexon Corp.). Mr. Rosenman received a B.B.A. in finance and accounting from Pace University and an M.B.A. in finance from the Wharton School of the University of Pennsylvania.

Mr. Rosenman's qualifications as director include his experience in the biotechnology and pharmaceuticals industries, his extensive leadership experience as both a Chief Executive Officer and a Chief Financial Officer, his diverse industry background in companies ranging from large multinational corporations to startups, and his broad base of expertise with initial public offerings, mergers & acquisitions, turn-arounds and high growth companies.

Allan L. Shaw has served as a director of the Company since September 15, 2015. From January 2016 to February 2017, Mr. Shaw was the Chief Financial Officer and Treasurer of Syndax Pharmaceuticals, Inc., a publicly listed clinical stage biopharmaceutical company. Mr. Shaw was Managing Director of Alvarez & Marsal LLC, a global professional services firm, and led their biopharmaceutical consulting practice, from December 2011 to March 2015, and supported the firm on an ad hoc basis from March 2015 to October 2015. From 2009 to 2011, he served as the Chief Financial Officer of NewLead Holdings LTD., a publicly traded global shipping company. From 2005 to

2009, he was the founder and Senior Managing Director of Shaw Strategic Capital LLC, an international financial advisory firm, focused on providing strategic financial counsel on a wide variety of issues such as general corporate finance, mergers and acquisitions, capital structuring, licensing and capital markets. From 2002 to 2004, Mr. Shaw was the Chief Financial Officer of Serono S.A., a publicly traded global biotechnology company, and from 1994 to 2001, he was the Chief Financial Officer of Viatel, Inc., a publicly traded international communications company. Mr. Shaw serves on the board of directors of Edith & Carl Marks JCH of Bensonhurst, a non-profit organization. He also served on the board of directors of Akari Therapeutics, Plc. from 2013 to 2016, the Central New York Biotech Accelerator (formerly Central New York—Biotech Research Center) from 2009 to 2013, NewLead Holdings LTD. from 2009 to 2011, Navios Maritime Holdings, Inc. from 2005 to 2010, Serono S.A. as an Executive Management Board Member from 2002 to 2004 and Viatel Inc. from 1996 to 2002. He has contributed to several corporate governance books and is a member of the American Institute of Certified Public Accountants, New York Society of Certified Public Accountants and Corporate Directors Group. Mr. Shaw received a B.S. from the State University of New York (Oswego College) and is a certified public accountant in the State of New York.

Mr. Shaw's qualifications as a director include his extensive leadership experience as a Chief Financial Officer, his diverse industry background in companies of ranging sizes, and his broad base of expertise with capital markets and operational expertise with a view toward corporate governance, risk management and leadership.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file certain reports of ownership with the SEC. Such officers, directors and stockholders are also required by SEC rules to provide us with copies of all Section 16(a) forms that they file. Based solely on our review of copies of such forms received by us or on written representations from reporting persons that no other reports were required during the fiscal year ended December 31, 2016, we believe that during 2016, all of our executive officers, directors and 10% stockholders timely complied with all Section 16(a) filing requirements except as follows: (i) on April 20, 2016, John L. Slebir, Senior Vice President, Business Development and General Counsel and Secretary, filed one late Form 4 reporting the sale of shares to satisfy tax liability due upon the vesting of restricted stock units; (ii) on April 11, 2016, Santosh T. Varghese, M.D., Chief Medical Officer, filed one late Form 4 reporting the sale of shares to satisfy tax liability due upon the vesting of restricted stock units; and (iv) on May 4, 2016, David Y. Norton, a director of the Company, filed one late Form 4 reporting the grant of restricted stock units.

Code of Business Conduct and Ethics

The Board has adopted a Code of Business Conduct and Ethics, which is applicable to all of our employees, officers and directors. The Code of Business Conduct and Ethics may be found on our website at *www.vivus.com*. We will disclose any amendment to the Code of Business Conduct and Ethics or waiver of a provision of the Code of Business Conduct and Ethics, including the name of the person to whom the waiver was granted, on our website on the Investor Relations page within four business days following the date of such amendment or waiver.

Material Changes to Nominee Recommendation Procedures

There are no material changes to the procedures by which stockholders may recommend nominees to our Board.

Audit Committee

We have a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee's main function is to oversee our accounting and financial reporting processes, internal system of control, independent registered public accounting firm relationships and the audits of our financial statements. The Audit Committee consists of directors Norton, Rosenman and Shaw, none of whom is an employee of the Company and each of whom is independent within the meaning of Rule 5605 of the NASDAQ listing rules and the independence requirements of Rule 10A-3 of the Exchange Act, in each case as currently in effect. The Board has determined that Mr. Rosenman is an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K. Mr. Rosenman serves as Chairman of the Audit Committee.

Item 11. Executive Compensation

Compensation Discussion and Analysis

This Compensation Discussion and Analysis discusses:

- the elements of our compensation programs applicable to the named executive officers for 2016;
- the actions taken in 2016 with respect to compensation for the named executive officers; and
- the compensation of our named executive officers during 2016.

We refer to the following individuals as our "named executive officers" for 2016:

Name	Title
Seth H. Z. Fischer	Chief Executive Officer
Mark K. Oki	Chief Financial Officer and Chief Accounting Officer
John L. Slebir	Senior Vice President, Business Development and General Counsel and
	Secretary
Santosh T. Varghese, M.D.	Chief Medical Officer

General Philosophy

We compensate our named executive officers through a combination of base salary, cash bonus and equity compensation designed to be competitive with comparable companies. Our core objective is to attract, retain, reward and motivate our named executive officers and to align our performance with the long-term interests of our stockholders. We evaluate our compensation based on a number of factors, including corporate and individual performance. In 2016, our focus was to maximize the value of Qsymia® and STENDRA®/SPEDRATM and to develop a strategic plan for delivering long-term stockholder value. To reflect the realities of the branded anti-obesity market, we continued to address our cost structure, which decreased by 56%, which includes the reduction of Qsymia selling and marketing expenses by 59%. In addition, we received \$70 million for the commercial licensing rights of STENDRA/SPEDRA in the U.S., South America, Canada and India. These efforts resulted in profitability for the Company in 2016 and a strengthening of our balance sheet. We also made the decision to develop our product candidate pipeline to build long-term stockholder value. The first product announced as a result of this effort is the development of tacrolimus for the treatment of pulmonary arterial hypertension.

Our compensation programs are designed to:

• attract and retain our named executive officers by providing an overall compensation package that is competitive in the market in which we compete through cash bonuses and long-term equity awards based on corporate and individual performance;

- share the risks and rewards of our business with our named executive officers;
- align the interests of our named executive officers with the interests of our stockholders in particular through equity awards; and
- compensate our named executive officers in a manner that is efficient and affordable for the Company.

In determining the compensation for our named executive officers, we, in connection with consulting with our compensation consultant, Radford, an Aon Company, or Radford, consider a number of factors, including information regarding comparably sized companies in the biotechnology and pharmaceutical industries in the United States. We also consider the seniority level of the employee, and the employee's overall performance and contribution to the Company. Especially with respect to the compensation of our Chief Executive Officer, we also consider our performance and our goal of retaining our Chief Executive Officer with his extensive industry experience and skills and familiarity with the Company.

Executive Compensation Program Objectives

Executive Compensation Programs

Our Compensation Committee relies on experience with other companies in our industry and third-party industry compensation surveys, including those compiled and periodically provided to the Compensation Committee by Radford, executive compensation data as reported in peer company proxies, and internally generated comparisons of the various elements of total compensation to peer group companies, or the Peer Group, to determine base salary, performance-based cash bonuses and performance-based equity awards and the portion of total compensation each element should comprise. Given our named executive officers' level of responsibility in the Company and impact on the performance of the Company, we believe that a larger portion of our named executive officers' compensation should be based on performance than that of our lower-level employees. Consistent with our compensation philosophy, we have structured each element of our compensation program as described below.

We design our base pay to provide the essential reward for an employee's work. Once base pay levels are determined, annual increases in base pay are provided to recognize an employee's expanded role and capabilities, specific performance achievements and contributions. Adjustments may also be made for changes in comparable peer company compensation levels in order to remain competitive to attract and retain employees.

We also utilize annual cash bonuses to compensate employees for the achievement of corporate objectives as well as an employee's outstanding results while allowing us to remain competitive with other companies.

We utilize equity-based compensation to ensure that we have the ability to retain employees over a longer period of time and to provide employees with a form of reward that aligns their interests with those of our stockholders. Employees whose skills and results we deem to be critical to our long-term success are eligible to receive higher levels of equity-based compensation. In 2016, our annual equity-based compensation to our named executive officers, other than Mr. Fischer, consisted of stock options. In 2016, our annual equity-based compensation to Mr. Fischer included a mix of stock options and restricted stock units due to the cancellation of a portion of his 2016 stock option grant, given that such grant exceeded the 2010 Equity Incentive Plan limits, and subsequent grant of restricted stock units in September 2016. The annual equity awards to our named executive officers, other than the 2016 grant of restricted stock units to Mr. Fischer, and our other employees vest over a period of four years, providing a long-term incentive to our employees as they work on multi-year commercialization and drug development programs. The restricted stock units granted to Mr. Fischer in 2016 will vest

according to the following vesting schedule: 50% on January 22, 2017 and an additional 12.5% on each of April 22, 2017, July 22, 2017, October 22, 2017 and January 22, 2018, subject to Mr. Fischer continuing to be a Service Provider (as defined in the Company's 2010 Equity Incentive Plan) with the Company on the relevant vesting dates.

Core benefits, such as our basic health benefits, 401(k) program, disability and life insurance plans, are designed to provide support to employees and their families and to be competitive with other companies in our industry.

Our Peer Group

For determining 2016 compensation levels, our Compensation Committee, after consulting with Radford, chose a group of 24 companies to include in the Peer Group based on their similarity to us in terms of industry focus, stage of development, market capitalization size, revenues, financial position, entity size, pharmaceutical assets, business strategy, and the geographical location of the talent pool with which we compete. The market data for the Peer Group was drawn from publicly available documents. Additional compensation data for our Chief Executive Officer was obtained from the Radford Global Life Sciences Survey, which was provided to the Compensation Committee by Radford. For 2016, the Peer Group, which was determined by the Compensation Committee after consulting with Radford, consisted of the following companies:

Adamas Pharmaceuticals, Inc.	Omeros Corporation
Aegerion Pharmaceuticals, Inc. (acquired by Novelion	Orexigen Therapeutics, Inc.
Therapeutics Inc.)	Permix Therapeutics Holdings, Inc.
AMAG Pharmaceuticals, Inc.	Raptor Pharmaceuticals Corp.
Aradigm Corporation	Retrophin, Inc.
Arena Pharmaceuticals, Inc.	SciClone Pharmaceuticals, Inc.
Corcept Therapeutics Incorporated	Spectrum Pharmaceuticals, Inc.
Corium International, Inc.	Sucampo Pharmaceuticals, Inc.
CTI BioPharma Corp.	Supernus Pharmaceuticals, Inc.
Cumberland Pharmaceuticals Inc.	Xenoport, Inc. (acquired by Arbor Pharmaceuticals, LLC)
Depomed, Inc.	Zafgen, Inc.
Enanta Pharmaceuticals, Inc.	Zogenix, Inc.
ImmunoGen, Inc.	

The data on the compensation practices of the Peer Group is gathered by our searches of publicly available information. Due to the variations between companies reporting the individual and roles for which compensation is disclosed, directly comparable information is not available from each peer company with respect to each of our named executive officers. In considering the Peer Group compensation data, the Compensation Committee recognizes that executives at different companies can play significantly different roles, with different responsibilities and scope of work, even though they may hold similar titles or positions. Moreover, it is not always possible to determine the respective qualitative factors that may influence compensation or their perceived importance to their companies' business, strategy and objectives. Accordingly, the Compensation Committee looked to information about the Peer Group as one of a number of considerations in establishing executive compensation levels (as described in more detail below). In determining compensation for our named executive officers, the Compensation and the collective experience of the members of our Compensation Committee and executive management to establish our compensation practices.

Stockholder Say-on-Pay Votes

In accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we held a non-binding stockholder vote at our 2016 Annual Meeting of Stockholders, or the 2016 Annual Meeting, on our 2015 executive compensation practices. The Compensation Committee, while not bound to act on a negative vote, carefully considers the opinion of its stockholders in making compensation decisions. We also have an ongoing dialogue with our largest stockholders about various aspects of our business and corporate governance, and we take into consideration the concerns raised by such stockholders. The stockholders voted to approve, on an advisory basis, our 2015 executive compensation at the 2016 Annual Meeting. In light of such approval and after careful consideration, the Compensation Committee did not make any material changes to the Company's executive compensation practices. In alignment with our philosophy on stockholder say-on-pay and with the results of the say-on-pay frequency vote held in 2011, we intend to continue to hold non-binding stockholder say-on-pay trequency vote at our 2017 Annual Meeting of Stockholders.

Executive Compensation Components

We have structured each element of our compensation package as follows:

Base Salary

We determine our named executive officers' salaries based on job responsibilities and individual experience, and we benchmark the amounts we pay against comparable competitive market compensation for similar positions within our Peer Group and industry. Specifically, we utilize information obtained from our comparison of Peer Group compensation data and the annual Radford Global Life Sciences Survey, or the Comparison Data. Our Compensation Committee reviews the salaries of our named executive officers annually, and our Compensation Committee grants increases in salaries based on a review of the Comparison Data and of individual performance during the prior calendar year provided that any increases are within the guidelines determined by the Compensation Committee for each position. Guidelines are adjusted and modified on an annual basis based on information obtained from our review of the Comparison Data, as well as from our Compensation Committee's and management's experience and general employment market conditions for our industry and geographic area. Increases in base salary are based on individual performance as merit increases and on the Comparison Data as market increases; such increases are not automatic or guaranteed.

In January 2016, our Compensation Committee reviewed base salaries for our named executive officers. The Compensation Committee considered a number of factors in setting the 2016 base salaries for our named executive officers, including the status of the commercial launch of Qsymia as a treatment for obesity in the United States and the status of the commercial launch of STENDRA and SPEDRA in the United States and the European Union. In addition, the Compensation Committee reviewed the Comparison Data and the individual performance of our named executive officers during the prior calendar year. Following the Compensation Committee's review, Messrs. Fischer and Slebir and Dr. Varghese received merit increases to their base salaries based on individual performance. Mr. Oki joined the Company in October 2015 and therefore did not receive any increase to his base salary.

The table below provides the base salary for each named executive officer:

	2016	
	Increase	2016
	to Base	Base
Name	Salary	Salary (\$)
Seth H. Z. Fischer	3.2%	696,600
Mark K. Oki	—	350,000
John L. Slebir	3.2%	452,800
Santosh T. Varghese, M.D.	3.2%	407,600

2016

Cash Bonus Plan

Annual Bonus Plan. We awarded cash bonuses under the Annual Bonus Plan to our named executive officers based on our overall corporate performance, achievement of general corporate performance objectives established by our Board of Directors in June 2016 and individual performance. The cash bonuses are based on an end-of-year assessment by our Compensation Committee. The corporate performance and the achievement of corporate objectives determine the percent of the eligible cash bonus to be paid to each named executive officer. Each named executive officer's individual performance is reviewed to determine how such named executive officer's performance contributed to our overall corporate performance and achievement of corporate performance objectives. The Compensation Committee uses this information to determine the named executive officer's cash bonus award, such that the percent of the eligible bonus to be paid to a named executive officer may be increased, decreased or eliminated based on the individual performance review. Cash bonuses under the Annual Bonus Plan are awarded on a discretionary basis, and the Compensation Committee may modify, eliminate or adjust corporate objectives at any time, thereby ensuring that employees are compensated for performance.

For 2016, our corporate performance objectives as approved by our Board in June 2016, were as follows:

- achieving certain strategic engagement and business strategy goals to increase stockholder value;
- achieving certain financial goals;
- achieving certain regulatory and intellectual property goals; and
- achieving certain compliance excellence goals and certain human resources goals.

In the Compensation Committee's opinion, the Company succeeded in meeting the following corporate objective: achieving certain compliance excellence goals and certain human resources goals. Further, in the Compensation Committee's opinion, the Company succeeded, in part, in meeting the following corporate objectives:

- achieving certain strategic engagement and business strategy goals to increase stockholder value;
- achieving certain financial goals; and
- achieving certain regulatory and intellectual property goals.

Based on the achievements in 2016, the Compensation Committee determined that bonuses under the Annual Bonus Plan equaling 90% of the eligible cash bonus potential would be paid for 2016 to our eligible employees under the plan, including our named executive officers.

The table below provides the target bonus for each named executive officer who participated in the Annual Bonus Plan for 2016 and the executive's actual bonus amount:

Name	2016 Target Bonus as a Percentage of Base Salary	2016 Target Bonus (\$)	2016 Maximum Bonus as a Percentage of Base Salary	2016 Maximum Bonus (\$)(1)	2016 Actual Bonus as a Percentage of Base Salary	2016 Actual Bonus (\$)
Seth H. Z. Fischer	80%	557,280	80%	557,280	72%	501,552
Mark K. Oki	40%	140,000	40%	140,000	36%	126,000
John L. Slebir	50%	226,400	50%	226,400	45%	203,760
Santosh T. Varghese, M.D.	40%	163,040	40%	163,040	36%	146,736

 The Compensation Committee may award up to 10% of additional bonus to each named executive officer based on individual performance.

For 2017, under the Annual Bonus Plan, the Compensation Committee determined that our Chief Executive Officer, Chief Financial Officer, Senior Vice Presidents (or equivalent pay grade) and Vice Presidents (or equivalent pay grade) would be eligible to receive target and maximum cash bonuses of up to 80%, 40%, 50% and 40% of their base salaries, respectively. The table below provides the 2017 base salary and the target and maximum bonuses for each named executive officer who is participating in the Annual Bonus Plan for 2017:

Name	2017 Base 	2017 Target Bonus as a Percentage of Base Salary	2017 Target Bonus (\$)	2017 Maximum Bonus as a Percentage of Base Salary	2017 Maximum Bonus (\$)
Seth H. Z. Fischer	721,000	80%	576,800	80%	576,800
Mark K. Oki	362,250	40%	144,900	40%	144,900
John L. Slebir	468,650	50%	234,325	50%	234,325
Santosh T. Varghese, M.D.	421,900	40%	168,760	40%	168,760

Equity Compensation

We award equity compensation to our named executive officers based on the performance of the named executive officer and guidelines related to each named executive officer's position in the Company. We determine our equity award guidelines based on information derived from our Compensation Committee's and management's experience. With respect to our named executive officers, we also utilize an internally generated comparison of companies and third party survey of companies in our industry, which was developed with information provided by Radford. Specifically, we utilize the Comparison Data to modify and adjust our equity award guidelines. We typically base awards to newly hired employees on these guidelines, and we base awards to continuing employees on these guidelines along with an employee's performance for the prior fiscal year. In determining the amount of awards, we generally do not consider an employee's current equity ownership in the Company or the prior awards that are fully vested. Rather, we evaluate each employee's awards based on the factors described above and competitive market factors in our industry.

Our stock option awards typically vest over a four-year period subject to the continued service of the employee to the Company. Twenty-five percent of the shares typically vest on the first anniversary of the option award, with the remaining shares vesting monthly in equal amounts over the remainder of the vesting period. Our restricted stock unit awards typically vest over a four-year period subject to the continued service of the employee to the Company. Twenty-five percent of the shares typically vest on each annual anniversary of the restricted stock unit award. Unless our employees (including our named executive officers) elect otherwise, upon the vesting of the restricted stock units shares of Common

Stock are sold to satisfy the tax liability due upon such vesting. We believe these vesting arrangements encourage our employees to continue service to the Company for a longer period of time and remain focused on our multi-year long-term drug development and commercialization programs.

Timing of Equity Awards. Our Compensation Committee typically makes award decisions for employees at its first meeting in each fiscal year. We believe annual awards at this time allow the Compensation Committee to consider a number of factors related to the stock option award and restricted stock unit award decisions, including corporate performance for the prior fiscal year, employee performance for the prior fiscal year and expectations for the upcoming fiscal year. With respect to newly hired employees, our practice is typically to make stock option awards at the first meeting of the Compensation Committee following the employee's hire date. We do not plan or time our stock option awards in coordination with the release of material non-public information for the purpose of affecting the value of executive compensation.

Allocation of Equity Compensation. In 2016, we granted stock options to purchase 4,980,835 shares of our Common Stock, of which stock options to purchase a total of 2,268,500 shares were awarded to named executive officers, representing approximately 46% of all stock option awards in 2016. Also, in 2016, we granted 562,500 restricted stock units, of which 300,000 restricted stock units were awarded to named executive officers, representing 53% of all restricted stock unit awards in 2016. Our Compensation Committee does not apply a formula for allocating stock options and restricted stock units to named executive officers. Instead, our Compensation Committee considers the role and responsibilities of the named executive officers, competitive factors, the non-equity compensation received by the named executive officers and the total number of stock options and restricted stock units to be granted in the fiscal year.

Type of Equity Awards. Under our 2010 Equity Incentive Plan, we may award incentive stock options, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, to our employees, and we may award nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance units and performance shares to our employees, directors and consultants. In 2016, we awarded stock options to our named executive officers, and in 2016, we also awarded restricted stock units to Mr. Fischer.

Equity Awards in 2016. In January 2016, our Compensation Committee reviewed equity compensation for our named executive officers. The Compensation Committee reviewed the Comparison Data and the individual performance of such named executive officers during the prior calendar year. Following the Compensation Committee's review, all of our named executive officers received stock options as reflected in the 2016 Grants of Plan-Based Awards Table below. In September 2016, Mr. Fischer also received restricted stock units in conjunction with the cancellation of a portion of his 2016 stock option grant given that such grant exceeded the 2010 Equity Incentive Plan limits, as reflected in the 2016 Grants of Plan-Based Awards Table below.

Retirement Savings Plan

We maintain a 401(k) retirement savings plan for the benefit of our eligible employees. Employees may elect to contribute their compensation up to the statutorily prescribed limit. We currently match employee contributions up to a maximum of 4% of an employee's salary per pay period. In 2016, the employer-match contribution limit was \$10,600 per employee.

Employment Agreement

Seth H. Z. Fischer, our Chief Executive Officer, entered into an employment agreement with the Company on September 3, 2013, which we refer to herein as the Employment Agreement.



Mr. Fischer's Employment Agreement has an initial term of four years, renewing annually thereafter unless either party provides notice of non-renewal. The Employment Agreement provides for:

- A base salary subject to annual review and adjustment by the Board or the Compensation Committee, which was initially set by the Compensation Committee at \$650,000;
- Eligibility to receive an annual cash incentive payment for the achievement of performance goals established by the Board or the Compensation Committee, with an opportunity to earn an incentive target of not less than 80% of Mr. Fischer's base salary;
- A one-time stock option grant to purchase 1,000,000 shares of our Common Stock, with an exercise price equal to the fair market value of our Common Stock on the grant date, of which 1/36th of the total number of shares subject to the option shall vest each month, subject to Mr. Fischer's continued service to the Company on such dates;
- Housing assistance and benefits for costs incurred with temporary housing near our corporate headquarters of up to \$50,000 and a car allowance in Mr. Fischer's home state;
- In the event Mr. Fischer decides not to enroll in our medical plan, we will provide Mr. Fischer \$15,000 annually, payable in equal monthly installments during the term of his employment for such medical benefits;
- If Mr. Fischer's employment had been terminated at any time prior to June 3, 2014, either (i) by the Company other than for Cause (as defined in the Employment Agreement), non-renewal or due to Mr. Fischer's death or Disability (as defined in the Employment Agreement) or (ii) voluntarily by Mr. Fischer for Good Reason (as defined in the Employment Agreement), then Mr. Fischer would have been entitled to receive severance benefits as follows: (i) monthly severance payments for a six-month severance period following termination equal to Mr. Fischer's monthly base salary immediately prior to employment termination (determined after disregarding any reduction in base salary that constitutes Good Reason); (ii) monthly severance payments during the six-month severance period equal to 1/12th of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; (iii) a lump sum cash payment equal to the prorated amount of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; and (iv) the unpaid portion of the annual bonus, if any, relating to any year prior to the calendar year of Mr. Fischer's termination of employment;
 - If Mr. Fischer's employment is terminated at any time on or after June 3, 2014 either (i) by the Company other than for Cause, non-renewal or due to Mr. Fischer's death or Disability or (ii) voluntarily by Mr. Fischer for Good Reason, then Mr. Fischer will be entitled to receive severance benefits as follows: (i) monthly severance payments during the 12-month severance period equal to Mr. Fischer's monthly base salary immediately prior to employment termination; (ii) monthly severance payments during the 12-month severance period equal to 1/12th of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; (iii) a lump sum cash payment equal to the prorated amount of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; and (iv) the unpaid portion of the annual bonus, if any, relating to any year prior to the calendar year of Mr. Fischer's termination of employment;
 - If the Company provides Mr. Fischer with written notice of non-renewal of his Employment Agreement, then Mr. Fischer will be entitled to receive severance benefits as follows: (i) monthly severance payments for a six-month severance period following termination equal to Mr. Fischer's monthly base salary immediately prior to employment termination; (ii) monthly severance payments during the six-month severance period equal to $1/12^{th}$ of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; (iii) a lump sum cash payment equal to the prorated amount of Mr. Fischer's target bonus for the fiscal year in which the termination

occurs; and (iv) the unpaid portion of the annual bonus, if any, relating to any year prior to the calendar year of Mr. Fischer's termination of employment;

- If Mr. Fischer's employment is terminated as a result of his death or Disability, then Mr. Fischer will be entitled to receive: (i) a lump sum cash payment equal to the prorated amount of Mr. Fischer's target bonus for the fiscal year in which the termination occurs; and (ii) the unpaid portion of the annual bonus, if any, relating to any year prior to the calendar year of Mr. Fischer's termination of employment; and
- Upon the closing of a Change of Control (as defined in the Employment Agreement), the vesting and exercisability of the option award granted to Mr. Fischer will automatically vest in full and become exercisable.

Under Mr. Fischer's Employment Agreement, a "Change of Control" occurs when:

- any person becomes a beneficial owner, directly or indirectly, of securities of the Company representing 40% or more of the total voting power represented by the Company's then outstanding voting securities;
- a merger or consolidation occurs, whether or not approved by the Board, other than a merger or consolidation that results in the outstanding voting securities of the Company immediately prior to the merger or consolidation to represent more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation;
- the stockholders of the Company approve a plan of complete liquidation of the Company;
- the Company sells or disposes of all or substantially all of the Company's assets, provided that the licensing or sale of Qsymia/Qsiva and/or Avanafil or other products developed by the Company in any non-U.S. territory would not constitute a Change of Control; or
- there is a change in the composition of the Board, as a result of which fewer than a majority of the directors are "Incumbent Directors." Incumbent Directors are directors who are either (i) directors of the Company as of September 3, 2013, or (ii) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination. An individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of the Company's directors is not considered an Incumbent Director.

Change of Control Benefits

A description of the change of control benefits given to our named executed officers and a table showing potential payments upon termination or change of control of our named executive officers are set forth below under the section entitled "Potential Payments Upon Termination or Change of Control for each Named Executive Officer."

Perquisites and Other Benefits

We annually review the perquisites that our named executive officers receive. We offer short-term and long-term disability insurance plans to all of our employees, including all of our named executive officers.

Compensation Process

The Compensation Committee reviews and approves the salaries and incentive compensation of our named executive officers and non-employee directors and reviews and approves all new hire stock



option awards to employees. In addition, the Compensation Committee approves equity awards for all employees as part of our annual performance review process. The Compensation Committee approves a pool of equity awards for employees who are not executive officers, and the Chief Executive Officer distributes this pool in his discretion and based on the performance of each individual. The agendas for meetings of the Compensation Committee are prepared by the Compensation Committee Chairman in consultation with management. Our Chief Executive Officer, Chief Financial Officer, and General Counsel typically attend the meetings of the Compensation Committee, but the Chief Executive Officer, the Chief Financial Officer and the General Counsel do not participate in deliberations relating to their own compensation. In rendering its decisions, the Compensation Committee considers the recommendations of the Chief Executive Officer, with input by the Chief Financial Officer and the General Counsel, the information regarding comparably sized companies in the biotechnology and pharmaceutical industries in the United States and its collective experience with other companies. Additionally, the Compensation Committee considers data and information provided by Radford. The Compensation Committee reviews the performance and compensation of the Chief Executive Officer and Chief Financial Officer and

Our Compensation Committee also works with our Chief Executive Officer and Chief Financial Officer in evaluating the financial, accounting, tax and retention implications of our various compensation programs.

Effect of Accounting and Tax Treatment on Compensation Decisions

Section 162(m) of the Code imposes a limit on the amount of compensation that we may deduct in any one year with respect to our Chief Executive Officer and each of our next three most highly compensated executive officers (other than the Chief Financial Officer), unless certain specific criteria are satisfied. While we consider the deductibility of compensation when making our compensation decisions, we believe that it is important to maintain the flexibility to compensate our executives in a manner we believe will promote our corporate goals and be in the best interests of our stockholders. Our Compensation Committee therefore has not adopted a policy requiring all compensation to be deductible.

Executive Time Off

All of our full-time employees, including our named executive officers, receive up to seven weeks of vacation each year, based upon the length of service. Mr. Fischer, our Chief Executive Officer, is entitled to receive four weeks of vacation each year. Unused vacation carries over to the following year and may accumulate up to three weeks at any time. Upon termination, all employees are paid their accrued benefit that existed as of the date of such termination. Additionally, all employees receive two personal days and eight sick days each year. Personal days expire if unused as of the end of the calendar year, but all employees are paid their accrued benefit of any unused personal days as of the date of termination. Sick days expire if unused as of the date of termination or the end of the calendar year.

2016 Summary Compensation Table

The following table presents information for our fiscal year ended December 31, 2016 concerning the total compensation paid to or accrued for our Chief Executive Officer, Chief Financial Officer, and each of our two other most highly compensated executive officers. We refer to these executive officers as our "named executive officers" below.

Name and Principal Position Seth H. Z. Fischer Chief Executive Officer and Director	<u>Year</u> 2016 2015 2014	Salary (\$)(1) 696,600 675,000 650,000	Bonus 	Stock Awards (\$)(3) 372,000 357,510	Option Awards (\$)(3) 561,600 1,105,267	Non-Equity Incentive Plan Compensation (\$)(4) 501,552 472,500 416.000	All Other Compensation (\$)(5) 40,600 41,359 36,909	Total(\$) 2,172,352 2,651,636 1,102,909
Mark K. Oki(6) Chief Financial Officer and Chief Accounting Officer	2014 2016 2015	350,000 71,794	30,000		52,510 146,520	126,000 20,825	4,000	532,510 269,139
John L. Slebir Senior Vice President, Business Development and General Counsel and Secretary	2016 2015 2014	452,800 438,800 425,000		185,726 336,350	351,000 433,245 254,940	203,760 191,975 170,000	10,600 10,600 10,400	1,018,160 1,260,346 1,196,690
Santosh T. Varghese, M.D. Chief Medical Officer	2016 2015 2014	407,600 395,000 385,000		143,562 279,775	308,880 227,571 167,010	146,736 138,250 123,200	10,600 10,600 10,400	873,816 914,983 965,385

(1) The amounts in this column include payments in respect of accrued vacation, holidays and sick days taken during the fiscal years presented.

(2) The amount in this column for Mr. Oki represents a sign on bonus in connection with his employment with the Company. Please see footnote 6 below.

(3) The amounts included in this column do not reflect compensation actually received by the named executive officer but represent the grant date fair value computed in accordance with FASB ASC Topic 718. The valuation assumptions used in determining such amounts are described in Note 15 to our consolidated financial statements included in the Original Filing. See also the 2016 Grants of Plan-Based Awards table below for information on option awards and restricted stock unit award made in 2016.

(4) The amounts for fiscal year 2016 in this column consist of cash bonus payments under the Annual Bonus Plan approved by the Compensation Committee in January 2017. Please see "Compensation Discussion and Analysis" above for a description of the Annual Bonus Plan.

(5) The amounts in this column include (i) contributions made by the Company under its 401(k) Plan; (ii) reimbursement for auto expenses and lodging expenses in Mountain View or Sunnyvale, CA; and (iii) excess medical waiver reimbursement, as provided in the following table:

Name	<u>Year</u>	401(k) Contributions (\$)	Reimbursement for Auto Expenses and Lodging Expenses in Mountain View or Sunnyvale, CA (\$)	Excess Medical Waiver Reimbursement (\$)	
Seth H. Z. Fischer	2016	10,600	15,000	15,000	
	2015	10,600	15,759	15,000	
	2014	4,333	17,576	15,000	
Mark K. Oki	2016	4,000	—	_	
	2015	_	_	_	
John L. Slebir	2016	10,600	—	_	
	2015	10,600	_	_	
	2014	10,400	_	_	
Santosh T. Varghese, M.D.	2016	10,600	_	_	
	2015	10,600	_	_	
	2014	10,400	_	_	

(6) Mr. Oki was appointed as our Chief Financial Officer and Chief Accounting Officer effective as of October 19, 2015. For 2015, compensation shown was earned in 2015 and not annualized.

2016 Grants of Plan-Based Awards

The following table provides information with regard to each grant of an award made to a named executive officer under any plan during the fiscal year ended December 31, 2016.

			Future Payou Incentive Plar		All Other Stock Awards: Number of Shares of	All Other Option Awards: Number of Securities	Exercise or Base Price of Option	Grant Date Fair Value of Stock
Name	Grant Date	Threshold(\$)	Target(\$)	Maximum(\$)	Stock or Units(#)	Underlying Options(#)	Awards (\$/Sh)(2)	and Option Awards(\$)
Seth H. Z. Fischer(3)		()	<u></u>	<u>(*)</u>		(.)	(0,200)(-)	
Stock Options	1/22/2016	_	_	_	_	1,000,000	1.06	561,600
Restricted Stock Unit Award	9/26/2016	—	—	_	300,000		_	372,000
Annual Bonus Plan	—	_	557,280	557,280	_	_	—	—
Mark K. Oki								
Stock Options	1/22/2016	_	_	_	_	93,500	1.06	52,510
Restricted Stock Unit Award	_	_	1 40 000	1 40 000	_	_	_	_
Annual Bonus Plan John L. Slebir		_	140,000	140,000	_	_	_	_
Stock Options	1/22/2016					625,000	1.06	351,000
Restricted Stock Unit Award	1/22/2010	_	_	_	_	025,000	1.00	551,000
Annual Bonus Plan	_	_	226,400	226,400	_	_	_	_
Santosh T. Varghese, M.D.			,	,				
Stock Options	1/22/2016	_	_	_	_	550,000	1.06	308,880
Restricted Stock Unit Award		_	_		_		_	_
Annual Bonus Plan	_	—	163,040	163,040	_	—	_	_

(1) The row entitled "Annual Bonus Plan" for each respective named executive officer in the table above reflects the threshold, target and maximum value of a cash bonus award to each respective named executive officer for 2016 under the Annual Bonus Plan approved by the Compensation Committee in January 2017. Please see "Compensation Discussion and Analysis" above for further detail on the maximum value of a cash bonus award to each respective named executive officer. The cash bonus award amounts actually paid under the Annual Bonus Plan to the named executive officers in 2016 are shown in the Summary Compensation Table for 2016 under the heading "Non-Equity Incentive Plan Compensation." Please see "Compensation Discussion and Analysis" above for a description of the Annual Bonus Plan.

(2) Stock options are granted at an exercise price equal to the fair market value of the Company's Common Stock, as determined by reference to the closing price reported by the NASDAQ Global Select Market on the date of grant.

(3) In January 2016, the Company granted Mr. Fischer an option to purchase 1,900,000 shares of the Company's Common Stock. However, subject to a limited exception, Section 6(b) of the Company's 2010 Equity Incentive Plan limits stock option grants to any participant during a given fiscal year to no more than an aggregate of 1,000,000 shares. In September 2016, Mr. Fischer and the Company entered into a Stock Option Acknowledgement, whereby the parties thereto agreed to cancel the portion of the January 22, 2016 option grant in excess of 1,000,000 shares such that the option grant would be treated as an option to purchase 1,000,000 shares of the Company's Common Stock in accordance with the 2010 Equity Incentive Plan. In September 2016, the Company also awarded Mr. Fischer 300,000 restricted stock units.

Outstanding Equity Awards at Fiscal Year-End

The following table presents certain information concerning the outstanding equity awards held as of December 31, 2016 by each named executive officer.

		Option Awa	rds		Stock A	Stock Awards		
<u>Name</u>	Number of Securities Underlying Unexercised Options (#) Exercisable(1)	Number of Securities Underlying Unexercised Options (#) Unexercisable(1)	Option Exercise Price (\$)(2)	Option Expiration Date(3)	Number of Shares or Units of Stock That Have Not Vested(#)(4)	Market Value of Shares or Units of Stock That Have Not Vested (\$)(5)		
Seth H. Z. Fischer	1,000,000	—	12.90	9/3/2020	37,125	42,694		
	301,204	327,396	2.74	1/23/2022	300,000	345,000		
	—	1,000,000	1.06	1/22/2023				
Mark K. Oki	65,625	159,375	1.26	10/30/2022				
	_	93,500	1.06	1/22/2023				
John L. Slebir	3,750	_	6.39	9/4/2019	2,800	3,220		
	166,250	_	8.74	1/21/2021	14,569	16,754		
	50,000	_	12.04	1/27/2022				
	70,000	_	12.39	1/25/2023				
	37,187	13,813	7.75	1/28/2021				
	118,066	128,334	2.74	1/23/2022				
	_	625,000	1.06	1/22/2023				
Santosh T. Varghese, M.D.	200,000		24.23	4/25/2022	1,850	2,128		
-	52,500	_	12.39	1/25/2023	8,269	9,509		
	24,791	9,209	7.75	1/28/2021	-	-		
	66,939	72,761	2.74	1/23/2022				
		550,000	1.06	1/22/2023				

- (1) The stock options outstanding generally vest, subject to the employee's continued service to the Company, with respect to 25% of the options upon the one year anniversary of the grant date and 1/36th of the remaining options vesting each month thereafter, with full vesting occurring on the fourth anniversary of the date of grant. Mr. Fischer's option grant on September 3, 2013 provided for monthly vesting of 1/36th of the total number of options granted, commencing after September 3, 2013, subject to his continued service to the Company.
- (2) Stock options are granted at an exercise price equal to the fair market value of our Common Stock, as determined by reference to the closing price reported by the NASDAQ Global Select Market on the date of grant.
- (3) Options granted in January 2013 or prior thereto generally expire 10 years from the date of grant, and options granted after January 2013 generally expire seven years from the date of grant.
- (4) Subject to the employee's continued service to the Company, the restricted stock unit awards outstanding vest (i) over a four year period with 25% vesting annually on each anniversary of the vesting commencement date, (ii) over a four year period with 25% vesting on January 1, 2016 and an additional 1/16th vesting at the end of each calendar quarter thereafter (i.e. March 31st, June 30th, September 30th and December 31st), or (iii) with 50% vesting on January 22, 2017 and an additional 12.5% vesting on each of April 22, 2017, July 22, 2017, October 22, 2017 and January 22, 2018.
- (5) The market value of unvested restricted stock units is based on the closing price of our Common Stock on the NASDAQ Global Select Market of \$1.15 per share on December 30, 2016 (the last trading day of the year).

2016 Option Exercises and Stock Vested

The following table shows the number of shares acquired pursuant to the vesting of restricted stock units by each named executive officer during the fiscal year ended December 31, 2016 and the aggregate dollar amount realized by the named executive officer upon vesting of the restricted stock units.

	Stock Awa	Stock Awards		
Name	Number of Shares Acquired on Vesting(#)	Value Realized on Vesting(\$)(1)		
Seth H. Z. Fischer	145,875	160,223		
Mark K. Oki		_		
John L. Slebir	88,731	97,604		
Santosh T. Varghese, M.D.	75,756	84,227		

(1) The aggregate dollar amount realized upon vesting is based on the closing price of our Common Stock on the NASDAQ Global Select Market on the vesting dates.

Potential Payments Upon Termination or Change of Control for each Named Executive Officer

Based upon a hypothetical triggering date of December 31, 2016, the quantifiable benefits for each named executive officer upon the occurrence of certain specified events are set forth in the table below.

Executive benefits and payments upon termination:	Involuntary termination not for cause or by constructive termination not in connection with a change of control(\$)	Benefits in connection with a change of control(\$)	Involuntary termination not for cause or by constructive termination in connection with a change of control(\$)	Written Notice of Non-Renewal of Employment Agreement(S)	Death or Disability(S)
Seth H. Z. Fischer(1)					
Base salary	696,600		696,600	348,300	_
Bonus	1,114,560		1,114,560	835,920	557,280
Medical continuation	—	—	—	—	—
Outplacement services				_	
Value of accelerated stock options(2)	—			—	—
Value of accelerated restricted stock units(3)	_	_	_	_	_
Mark K. Oki					
Base salary	262,500		525,000	_	
Bonus	209,125		314,125	—	_
Medical continuation	23,628		47,257	_	
Outplacement services				_	_
Value of accelerated stock options(2)	4,208		8,415	_	
Value of accelerated restricted stock units(3)	_			_	_
John L. Slebir					
Base salary	339,600		679,200		_
Bonus	359,410		529,210	_	_
Medical continuation	23,628		47,257	_	_
Outplacement services				_	_
Value of accelerated stock options(2)	28,125		56,250	_	_
Value of accelerated restricted stock units(3)	9,987	_	19,974		_



Executive benefits and payments upon termination:	Involuntary termination not for cause or by constructive termination not in connection with a change of control(\$)	Benefits in connection with a change of control(\$)	Involuntary termination not for cause or by constructive termination in connection with a change of control(\$)	Written Notice of Non-Renewal of Employment Agreement(\$)	Death or Disability(\$)
Santosh T. Varghese, M.D.					
Base salary	305,700	—	611,400		
Bonus	258,826	—	381,106	_	—
Medical continuation	23,628		47,257	—	—
Outplacement services	—	—	—	—	—
Value of accelerated stock options(2)	24,750	—	49,500	—	—
Value of accelerated restricted stock units(3)	5,818	_	11,637	_	_

- (1) Termination and change of control benefits for Seth H. Z. Fischer are set forth in his employment agreement. Please see "Compensation Discussion and Analysis—Employment Agreement" for details. If Mr. Fischer's employment is terminated at any time on or after June 3, 2014, either (i) by the Company other than for Cause, non-renewal or due to his death or Disability or (ii) voluntarily by him for Good Reason, then he will be entitled to receive severance benefits as follows: (i) \$696,600, representing monthly severance payments during the 12-month severance period equal to his monthly base salary immediately prior to employment termination; (ii) \$557,280, representing monthly severance payments during the 12-month severance period equal to 1/12th of his target bonus for the fiscal year in which the termination occurs; (iii) a lump sum cash payment equal to the prorated amount of his target bonus for the fiscal year in which the termination occurs; and (iv) the unpaid portion of the annual bonus, if any, relating to any year prior to the calendar year of his termination of employment.
- (2) Represents the aggregate value of the acceleration of vesting of the named executive officer's unvested stock options based on the product of (i) the spread between the closing price of our Common Stock on December 30, 2016 (the last trading day of the year) of \$1.15 and the exercise price of the stock options, and (ii) the number of shares of our Common Stock underlying unvested stock options. Aggregate intrinsic value represents only the value for those stock options in which the exercise price of the option is less than the market value of our stock on December 30, 2016 (the last trading day of the year).
- (3) Represents the aggregate value of the acceleration of vesting of the named executive officer's unvested restricted stock units based on the product of (i) \$1.15, which is the closing price of our Common Stock on December 30, 2016 (the last trading day of the year), and (ii) the number of shares of our Common Stock underlying unvested restricted stock units.

The Compensation Committee believes that providing our named executive officers protection against a termination of employment by the Company without cause or by a named executive officer for good reason is consistent with competitive practices and will help retain our named executive officers and maintain leadership stability. The Compensation Committee also believes that providing our named executive officers with benefits upon a change of control is in the best interests of our stockholders because change of control benefits help reduce the potential reluctance of our named executive officers to pursue certain change of control transactions that create employment uncertainty. The change of control benefits are designed to help retain the Company's named executive officers and maintain a stable work environment.

Because of the so-called "parachute" tax imposed by Section 280G of the Code, we limit the change of control benefits of our named executive officers such that no taxes will be imposed under Section 280G. For our named executive officers, we have agreed that their severance benefits will be either (i) delivered in full, or (ii) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the named executive officer on an after-tax

basis of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code.

Termination and Change of Control Benefits for our Chief Executive Officer

A description of the termination and change of control benefits for our Chief Executive Officer is set forth in the section entitled "Compensation Discussion and Analysis—Employment Agreement."

Termination and Change of Control Benefits for our Chief Financial Officer

On October 19, 2015, we entered into a Second Amended and Restated Change of Control and Severance Agreement, or the Amended Agreement, with Mark K. Oki.

The Amended Agreement provides that if Mr. Oki's employment with the Company is terminated without Cause or by Mr. Oki for Good Reason and the termination does not occur within three months before a Change of Control or 18 months after a Change of Control (as such terms are defined in the Amended Agreement) of the Company, Mr. Oki will receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments equal to the monthly salary Mr. Oki was receiving immediately prior to the termination date for nine months, (ii) monthly severance payments equal to 1/12th of Mr. Oki's target bonus for the fiscal year in which the termination occurs for nine months, (iii) an additional pro rata portion of Mr. Oki's target bonus for the fiscal year of months during such fiscal year Mr. Oki was employed by the Company (and a prior fiscal year to the extent the bonus for such prior fiscal year had not yet been declared and paid by the Company) multiplied by the average of the actual bonus percentage payouts in the two most recent years prior to the year of termination, (iv) up to nine months of reimbursement for premiums paid for COBRA coverage, and (vi) any then-outstanding and unvested equity awards held by Mr. Oki are subject to 50% accelerated vesting.

The Amended Agreement also provides that if Mr. Oki's employment with the Company is terminated by the Company without Cause or by Mr. Oki for Good Reason within three months before a Change of Control or 18 months after a Change of Control, Mr. Oki will receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments equal to the monthly salary Mr. Oki was receiving immediately prior to the Change of Control for 18 months, (ii) monthly severance payments equal to 1/12th of Mr. Oki's target bonus for the fiscal year in which the termination occurs for 18 months, (iii) an additional pro rata portion of Mr. Oki's target bonus for the fiscal year in which the termination occurs for 18 months during such fiscal year Mr. Oki was employed by the Company (and a prior fiscal year to the extent the bonus for such prior fiscal year had not yet been declared and paid by the Company) multiplied by the average of the actual bonus percentage payouts in the two most recent years prior to the year of termination, and (iv) up to 18 months of reimbursement for premiums paid for COBRA coverage. The Amended Agreement also provides that if Mr. Oki's employment is terminated without Cause or for Good Reason within three months before a Change of Control or 18 months after a Change of Control, the vesting and exercisability of all equity awards granted to Mr. Oki by the Company will automatically vest in full and become immediately exercisable.

For purposes of the Amended Agreement, a "Change of Control" occurs when:

• any person becomes a beneficial owner, directly or indirectly, of securities of the Company representing 15% or more of the total voting power represented by the Company's then outstanding voting securities without the approval of the Board;



- a merger or consolidation occurs, whether or not approved by the Board, other than a merger or consolidation which results in the outstanding voting securities of the Company immediately prior to the merger or consolidation to represent more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation;
- the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or
- there is a change in the composition of the Board, as a result of which fewer than a majority of the directors are "Incumbent Directors." Incumbent Directors are directors who are either (i) directors of the Company as of May 1, 2015, or (ii) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination. An individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of the Company's directors is not considered an Incumbent Director.

Termination and Change of Control Benefits for our Other Named Executive Officers

On July 5, 2013, we entered into an Amended and Restated Change of Control and Severance Agreement, effective July 1, 2013, with each of our named executive officers, other than Messrs. Fischer and Oki, that provided for certain benefits in the event of a termination or change of control. A description of the termination and change of control benefits for these named executive officers is provided below.

The Amended and Restated Change of Control and Severance Agreements provided that if a named executive officer's employment with the Company was terminated without Cause or by the named executive officer for Good Reason and the termination did not occur within 24 months after a Change of Control (as such terms are defined in the Amended and Restated Change of Control and Severance Agreements) of the Company, the named executive officer would receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments during the period from the date of the named executive officer's termination until the date that is six months after the effective date of termination or, for purposes of this paragraph only, the Six-Month Severance Period, equal to the monthly salary the named executive officer was receiving immediately prior to the termination date; (ii) monthly severance payments during the Six-Month Severance Period equal to $1/12^{th}$ of the named executive officer pursuant to (i) above; (iii) an additional pro-rated portion of the named executive officer's target bonus; (iv) up to 24 months of reimbursement for premiums paid for COBRA coverage; (v) accelerated vesting of the named executive officer's then-outstanding and unvested equity awards, to the extent that any of the then-unvested and outstanding shares of the Company's Common Stock subject to such equity awards otherwise would have vested through the date of the named executive officer's termination of employment with the Company, had each such equity award been subject to a monthly vesting schedule; and (v) outplacement services with a total value not to exceed \$20,000, to be provided during the Six-Month Severance Period.

The Amended and Restated Change of Control and Severance Agreements also provided that if a named executive officer's employment with the Company was terminated by the Company without Cause or by the named executive officer for Good Reason within 24 months after a Change of Control of the Company, the named executive officer would receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments during the period from the date of the named executive officer's termination until the date 24 months after the effective date of the termination, or

for purposes of this paragraph only, the 24-Month Severance Period, equal to the monthly salary the named executive officer was receiving immediately prior to the change of control; (ii) monthly severance payments during the 24-Month Severance Period equal to $1/12^{\text{th}}$ of the named executive officer's target bonus (as such term is defined in the Amended and Restated Change of Control and Severance Agreements) for the fiscal year in which the termination occurred for each month in which severance payments were made to the named executive officer pursuant to (i) above; (iii) an additional pro-rated portion of the named executive officer's target bonus; (iv) up to 24 months of reimbursement for premiums paid for COBRA coverage; and (v) outplacement services with a total value not to exceed \$20,000. The Amended and Restated Change of Control and Severance Agreements for our named executive officers also provided for the automatic vesting in full of all outstanding equity awards held by the named executive officers upon the close of a Change of Control.

Under such agreements, a "Change of Control" occurred when:

- any person becomes a beneficial owner, directly or indirectly, of securities of the Company representing 15% or more of the total voting power represented by the Company's then outstanding voting securities without the approval of the Board;
- a merger or consolidation occurs, whether or not approved by the Board, other than a merger or consolidation which results in the outstanding voting securities of the Company immediately prior to the merger or consolidation to represent more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or
- there is a change in the composition of the Board, as a result of which fewer than a majority of the directors are "Incumbent Directors." Incumbent Directors are directors who are either (i) directors of the Company as of July 1, 2013, or (ii) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination. An individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of the Company's directors is not considered an Incumbent Director.

On July 20, 2015, we entered into an Amended Agreement with each of our named executive officers other than Messrs. Fischer and Oki, effective as of July 20, 2015. The Amended Agreements with such named executive officers amended, restated and replaced the Amended and Restated Change of Control and Severance Agreements previously entered into and described above.

The Amended Agreement provides that if the named executive officer's employment with the Company is terminated without Cause or by the named executive officer for Good Reason and the termination does not occur within three months before a Change of Control or 18 months after a Change of Control (as such terms are defined in the Amended Agreement) of the Company, the named executive officer will receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments equal to the monthly salary the named executive officer was receiving immediately prior to the termination date for nine months, (ii) monthly severance payments equal to $1/12^{\text{th}}$ of the named executive officer's target bonus for the fiscal year in which the termination occurs for nine months, (iii) an additional pro rata portion of the named executive officer was employed by the Company (and a prior fiscal year to the extent the bonus for such prior fiscal year has not yet been declared and paid by the Company) multiplied by the average of the actual bonus percentage payouts in the two most recent years prior to the year of termination, (iv) up to nine months of reimbursement for premiums paid for COBRA coverage, and (vi) any then-outstanding and unvested equity awards held by the named executive officer are subject to 50% accelerated vesting.

The Amended Agreement also provides that if the named executive officer's employment with the Company is terminated by the Company without Cause or by the named executive officer for Good Reason within three months before a Change of Control or 18 months after a Change of Control, the named executive officer will receive, subject to signing a release of claims in favor of the Company, (i) monthly severance payments equal to the monthly salary the named executive officer's target bonus for the fiscal year in which the termination occurs for 18 months, (ii) an additional pro rata portion of the named executive officer's target bonus for the fiscal year in which the termination occurs calculated based on the number of months during such fiscal year the named executive officer was employed by the Company (and a prior fiscal year to the extent the bonus for such prior fiscal year and paid by the Company) multiplied by the average of the actual bonus percentage payouts in the two most recent years prior to the year of termination, and (iv) up to 18 months of reimbursement for premiums paid for COBRA coverage. The Amended Agreement also provides that if the named executive officer's employment is terminated without Cause or for Good Reason within three months before a Change of Control or 18 months after a Change of Control, the vesting and exercisability of all equity awards granted to the named executive officer by the Company will automatically vest in full and become immediately exercisable.

For purposes of the Amended Agreement, a "Change of Control" occurs when:

- any person becomes a beneficial owner, directly or indirectly, of securities of the Company representing 15% or more of the total voting power represented by the Company's then outstanding voting securities without the approval of the Board;
- a merger or consolidation occurs, whether or not approved by the Board, other than a merger or consolidation which results in the outstanding voting securities of the Company immediately prior to the merger or consolidation to represent more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation;
- the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or
- there is a change in the composition of the Board, as a result of which fewer than a majority of the directors are "Incumbent Directors." Incumbent Directors are directors who are either (i) directors of the Company as of May 1, 2015, or (ii) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination. An individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of the Company's directors is not considered an Incumbent Director.

Director Compensation

The following table sets forth the compensation paid by us during the fiscal year ended December 31, 2016 to our non-employee directors:

Name	Year	Fees Earned or Paid in Cash(\$)(1)	Stock Awards(\$)(2)	Option Awards(\$)(3)	All Other Compensation (\$)(4)	Total(\$)
David Y. Norton(5)(6)	2016	81,500	61,875		10,177	153,552
Jorge Plutzky, M.D.(5)(6)	2016	52,000	61,875		13,259	127,134
Eric W. Roberts(5)(6)	2016	69,000	82,500		9,341	160,841
Herman Rosenman(5)(6)	2016	82,500	61,875		15,722	160,097
Allan L. Shaw(5)(6)	2016	81,500	82,500		9,341	173,341
Mayuran Sriskandarajah(5)(6)	2016	65,875	82,500	—	6,008	154,383

(1) Under the cash compensation arrangement approved by the Board on April 29, 2016, each non-employee director will receive an annual retainer of \$40,000, with the Chairman of the Board of Directors receiving an additional \$25,000 per year, the Chairman of the Audit Committee receiving an additional \$20,000 per year, the Chairman of the Compensation Committee receiving an additional \$15,000 per year, the Chairman of the Nominating and Governance Committee receiving an additional \$10,000 per year, members of the Audit Committee (other than the Chairman of such Committee) receiving an additional \$10,000 per year, members of the Compensation Committee (other than the Chairman of such Committee) receiving an additional \$10,000 per year, members of the Nominating and Governance Committee) receiving an additional \$7,500 per year, members of the Nominating and Governance Committee (other than the Chairman of such Committee) receiving an additional \$5,000 per year, and members of any unchartered committees receiving an additional \$1,500 per meeting attended. The annual retainers, less any amounts previously paid under the then existing compensation arrangement, will be paid in equal quarterly installments effective as of October 30, 2015, and the per meeting fees for any unchartered committees will be paid quarterly effective as of April 29, 2016.

(2) As of December 31, 2016, the aggregate number of restricted stock units outstanding for each non-employee director was as follows:

Name	Stock awards outstanding at 12/31/16
David Y. Norton	—
Jorge Plutzky, M.D.	—
Eric W. Roberts	29,168
Herman Rosenman	—
Allan L. Shaw	29,168
Mayuran Sriskandarajah	29,168

(3) As of December 31, 2016, the aggregate number of stock options outstanding for each non-employee director was as follows:

Name	Stock options outstanding at 12/31/16
David Y. Norton	75,000
Jorge Plutzky, M.D.	75,000
Eric W. Roberts	25,000
Herman Rosenman	75,000
Allan L. Shaw	25,000
Mayuran Sriskandarajah	25,000

- (4) During 2016, restricted stock units held by non-employee directors of the Company vested. These restricted stock units were settled by issuing to each non-employee director shares in the amount due to the director upon vesting, less the portion required to satisfy the estimated income tax liability based on the published stock price at the close of market on the settlement date or the next trading day, which the Company issued to the non-employee director in cash. The amounts shown in this column for each non-employee director represents this cash.
- (5) Messrs. Roberts and Shaw have served as directors of the Company since September 2015, Messrs. Norton and Rosenman have served as directors of the Company since July 2013, and Dr. Plutzky has served as a director of the Company since May 2013. Mr. Sriskandarajah served as a director of the Company from September 2015 to January 2017.
- (6) Since October 2015, the Audit Committee has consisted of Messrs. Norton, Rosenman and Shaw, with Mr. Rosenman designated as the Chairman of the Audit Committee. From October 2015 to January 2017, the Nominating and Governance Committee consisted of Messrs. Norton, Roberts and Sriskandarajah, with Mr. Sriskandarajah designated as the Chairman of the Nominating and Governance Committee. Since January 2017, the Nominating and Governance Committee has consisted of Messrs. Norton acting as the Chairman of the Nominating and Governance Committee. Since October 2015, the Compensation Committee has consisted of Messrs. Roberts, Rosenman and Shaw, with Mr. Shaw designated as the Chairman of the Compensation Committee. Mr. Norton has served as the Chairman of the Board of Directors since September 2014.

The previous cash and equity compensation arrangement for our non-employee directors was approved by the Board on August 14, 2013, and was effective as of July 19, 2013. As further described below, on April 29, 2016, the Board approved changes to the cash and equity compensation arrangement for the Company's non-employee directors.

Under the previous cash compensation arrangement, each non-employee director would receive an annual retainer of \$40,000, with the Chairman of the Board of Directors receiving an additional \$25,000 per year, the Chairman of the Audit Committee receiving an additional \$15,000 per year, the Chairman of the Compensation Committee receiving an additional \$12,000 per year and the Chairman of the Nominating and Governance Committee receiving an additional \$7,500 per year. The annual retainers were paid in equal quarterly installments.

Under the previous equity compensation arrangement, following the initial appointment or election to the Board, each non-employee director would be granted a non-qualified stock option to purchase 25,000 shares of Common Stock with an exercise price equal to the fair market value of the Company's Common Stock as of the date of grant, or the Initial Option. Initial Options (i) vested monthly over three years on each monthly anniversary date commencing on the date service as a non-employee director began and would continue to vest so long as the non-employee director continued service to

the Company on such dates; (ii) had a seven-year term; and (iii) had a six-month post-termination exercise period.

Thereafter, provided that the non-employee director was re-elected to the Board and had served as a director for at least six months as of such election date, each such non-employee director would be granted on the date of the Annual Meeting of Stockholders a non-qualified stock option to purchase a number of shares of Common Stock to be determined by the Board with an exercise price equal to the fair market value of the Company's Common Stock as of the date of grant, or the Subsequent Option. Subsequent Options (i) vested monthly over one year following the date of grant so long as the non-employee director continued service to the Company on such dates; (ii) had a seven year term; and (iii) had a six month post-termination exercise period.

Effective as of July 19, 2013, options granted under the 2010 Equity Incentive Plan to non-employee directors have a term of seven years unless terminated sooner upon termination of status as a director or otherwise pursuant to the 2010 Equity Incentive Plan. Such options are transferable by the non-employee director only in certain limited circumstances, and each option is exercisable during the lifetime of the non-employee director only by such non-employee director or a permitted transferee.

On April 29, 2016, the Board approved changes to the cash and equity compensation arrangement for the Company's non-employee directors.

Under the new cash compensation arrangement, each non-employee director will receive an annual retainer of \$40,000, with the Chairman of the Board of Directors receiving an additional \$25,000 per year, the Chairman of the Audit Committee receiving an additional \$20,000 per year, the Chairman of the Compensation Committee receiving an additional \$15,000 per year, the Chairman of the Nominating and Governance Committee receiving an additional \$10,000 per year, members of the Audit Committee (other than the Chairman of such Committee) receiving an additional \$10,000 per year, members of the Compensation Committee (other than the Chairman of such Committee) receiving an additional \$10,000 per year, members of the Compensation Committee (other than the Chairman of such Committee) receiving an additional \$7,500 per year, members of the Nominating and Governance Committee (other than the Chairman of such Committee) receiving an additional \$7,500 per year, members of the Nominating and Governance Committee (other than the Chairman of such Committee) receiving an additional \$7,500 per year, members of the Nominating and Governance Committee (other than the Chairman of such Committee) receiving an additional \$7,500 per year, members of any unchartered committees receiving an additional \$1,500 per meeting attended. The annual retainers, less any amounts previously paid under the then existing compensation arrangement, will be paid in equal quarterly installments effective as of October 30, 2015, and the per meeting fees for any unchartered committees will be paid quarterly effective as of April 29, 2016.

Under the new equity compensation arrangement, following the initial appointment or election to the Board, each non-employee director will be granted as determined by the Board (i) a non-qualified stock option to purchase 125,000 shares of Common Stock with an exercise price equal to the fair market value of the Company's Common Stock as of the date of grant, or (ii) an equivalent number of restricted stock units to afford approximately the same value of (i), or (iii) a combination thereof, or the Initial Grant. Initial Grants vest monthly over three (3) years on each monthly anniversary date commencing on the date service as a non-employee director began and will continue to vest, subject to each such non-employee director continuing to be a Service Provider (as defined in the 2010 Equity Incentive Plan) on the relevant vesting dates and, if stock options, have (i) a seven (7) year term and (ii) a six (6) month post-termination exercise period.

Thereafter, provided that the non-employee director is re-elected to the Board and has served as a director for at least six (6) months as of such election date, each such non-employee director will be granted on the date of the Annual Meeting of Stockholders as determined by the Board (i) a non-qualified stock option to purchase 100,000 shares of Common Stock with an exercise price equal to the fair market value of the Company's Common Stock as of the date of grant, or (ii) an equivalent number of restricted stock units to afford approximately the same value of (i), or (iii) a combination thereof, or the Subsequent Grant. Subsequent Grants vest monthly over one (1) year following the date

of grant, subject to each such non-employee director continuing to be a Service Provider (as defined in the 2010 Equity Incentive Plan) on the relevant vesting dates and, if stock options, have (i) a seven (7) year term and (ii) a six (6) month post-termination exercise period.

Prior to the Board approving the new cash and equity compensation arrangement for non-employee directors on April 29, 2016, the Compensation Committee had undertaken a comprehensive review of non-employee director compensation with the advice of an independent compensation consultant. That review was ongoing at the time equity compensation awards were made in accordance with the then existing compensation arrangement to non-employee directors in connection with their appointments on September 15, 2015, in the case of Eric W. Roberts, Allan L. Shaw and Mayuran Sriskandarajah, or the New Directors, and the Annual Meeting of Stockholders on October 30, 2015, in the case of David Y. Norton, Jorge Plutzky, M.D. and Herman Rosenman, or the Incumbent Directors. To implement the new equity compensation arrangement effective as of their appointments or re-election, on April 29, 2016, the Board approved, in lieu of non-qualified stock options, the supplemental grant of 37,500 restricted stock units for each of the Incumbent Directors and the supplemental grant of 50,000 restricted stock units for each of the New Directors. To correspond with their grants upon re-election, the restricted stock units award for each of the Incumbent Directors shall vest pursuant to the following 12 month vesting schedule commencing on October 30, 2015: seven twelfths (7/12th) of the shares subject to the restricted stock units award shall vest and become exercisable on May 30, 2016, and an additional one twelfth (1/12th) of the shares subject to the restricted stock units award shall vest on the last day of each calendar month thereafter, subject to each such Incumbent Director continuing to be a Service Provider (as defined in the 2010 Equity Incentive Plan) on the relevant vesting dates. To correspond with their grants upon appointment, the restricted stock units award for each of the New Directors shall vest pursuant to the following 36 month vesting schedule commencing on September 15, 2015, or the Vesting Commencement Date: eight thirty-sixths (8/36th) of the shares subject to the restricted stock units award shall vest and become exercisable on May 15, 2016, and an additional one thirty-sixth (1/36th) of the shares subject to the restricted stock units award shall vest on the monthly anniversary of the Vesting Commencement Date thereafter, subject to each such New Director continuing to be a Service Provider (as defined in the 2010 Equity Incentive Plan) on the relevant vesting dates. The Company has settled and intends to continue to settle a portion of the restricted stock units in cash to cover the non-employee directors' tax liability in connection with each vesting event. On January 16, 2017, Mr. Sriskandarajah resigned from our Board.

Compensation Committee Interlocks and Insider Participation

None of our directors who served on our Compensation Committee during 2016 is currently or has been, at any time since our formation, one of our officers or employees. During 2016, no executive officer served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board or our Compensation Committee. The Compensation Committee currently consists of directors Roberts, Rosenman and Shaw. None of the members of our Compensation Committee during 2016 currently has or has had any relationship or transaction with a related person requiring disclosure pursuant to Item 404 of Regulation S-K.

Compensation Committee Report

The information contained in this report shall not be deemed to be "soliciting material" or "filed" with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference into a document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis with management. Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Amendment No. 1 to Annual Report on Form 10-K for the year ended December 31, 2016.

COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS

Eric W. Roberts Herman Rosenman Allan L. Shaw

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

Equity Compensation Plan Information

Information about our equity compensation plans at December 31, 2016, that were approved by our stockholders was as follows:

Plan Category	Number of Shares to be issued Upon Exercise of Outstanding Options and Rights	Weighted Average Exercise Price of Outstanding Options	Number of Shares Remaining Available for Future Issuance(3)
Equity compensation plans approved by stockholders(1)	10,109,900	\$ 4.6	2 9,162,648
Equity compensation plans not approved by stockholders(2)		\$ -	
Total	10,109,900	\$ 4.6	2 9,162,648

(1) Consists of three plans: our 1994 Employee Stock Purchase Plan, our 2001 Stock Option Plan and our 2010 Equity Incentive Plan.

(2) The Company currently has no instruments outstanding or available for issuance under non-approved equity compensation plans.

(3) Includes 8,895,532 shares for the 2010 Equity Incentive Plan and 267,116 shares for the 1994 Employee Stock Purchase Plan.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to us with respect to beneficial ownership of our Common Stock as of April 14, 2017 by (i) each person or entity who is known by us to own beneficially more than 5% of our Common Stock; (ii) each of our directors; (iii) each of our named executive officers, as specified in the "Compensation Discussion and Analysis" section of this Amendment; and (iv) all directors and executive officers as a group. Unless otherwise noted, the address of the persons or entities shown in the table is 900 E. Hamilton Avenue, Suite 550, Campbell, California, 95008.

	Beneficially Stock(1	
Name	Number of Shares	Percent
5% Holders		
North Tide Capital, LLC(2)	10,466,700	9.9%
Van Herk Investments B.V.(3)	5,380,799	5.1%
Non-Employee Directors		
David Y. Norton(4)	126,495	*
Jorge Plutzky, M.D.(5)	123,418	*
Eric W. Roberts(6)	73,544	*
Herman Rosenman(7)	124,880	*
Allan L. Shaw(8)	53,653	*
Named Executive Officers		
Seth H. Z. Fischer(9)	2,041,640	1.9%
Mark K. Oki(10)	120,228	*
John L. Slebir(11)	815,037	*
Santosh T. Varghese, M.D.(12)	633,845	*
All directors and executive officers as a group (9 persons)(13)	4,112,740	3.9%

* Less than 1%

- (1) Applicable percentage ownership is based on 105,643,606 shares of Common Stock outstanding as of April 14, 2017. Beneficial ownership is determined in accordance with SEC rules. In computing the number of shares beneficially owned by a person and the percentage of ownership of that person, shares of Common Stock subject to options and restricted stock units held by that person that will be exercisable/vested within 60 days of April 14, 2017 are deemed outstanding. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. The persons named in this table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws, where applicable, and except as indicated in the other footnotes to this table.
- (2) Consists of 10,466,700 shares of Common Stock as to which North Tide Capital, LLC and its affiliates (together "North Tide Capital") have shared voting and dispositive power. Beneficial ownership information is based on a Form 4 filed with the SEC on March 10, 2017. The address of North Tide Capital is 500 Boylston Street, Suite 1860, Boston, Massachusetts 02116.
- (3) Consists of 5,380,799 shares of Common Stock as to which Van Herk Investments B.V. and its affiliates (together "Van Herk Investments B.V.") have shared voting and dispositive power. Beneficial ownership information is based on a Schedule 13G/A filed

with the SEC on February 15, 2017. The address of Van Herk Investments B.V. is Lichtenauerlaan 30, 3062 ME Rotterdam, The Netherlands.

- (4) Consists of (i) 38,995 shares of Common Stock, (ii) 12,500 restricted stock units vested within 60 days of April 14, 2017, and (iii) 75,000 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (5) Consists of (i) 35,918 shares of Common Stock, (ii) 12,500 restricted stock units vested within 60 days of April 14, 2017, and (iii) 75,000 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (6) Consists of (i) 44,378 shares of Common Stock, (ii) 15,278 restricted stock units vested within 60 days of April 14, 2017, and (iii) 13,888 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (7) Consists of (i) 32,380 shares of Common Stock, (ii) 5,000 shares of Common Stock Mr. Rosenman is deemed to beneficially own that are held in an Individual Retirement Account for the benefit of Mr. Rosenman, (iii) 12,500 restricted stock units vested within 60 days of April 14, 2017, and (iv) 75,000 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (8) Consists of (i) 24,487 shares of Common Stock, (ii) 15,278 restricted stock units vested within 60 days of April 14, 2017, and (iii) 13,888 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (9) Consists of (i) 300,000 shares of Common Stock, (ii) 41,625 restricted stock units vested within 60 days of April 14, 2017, and (iii) 1,700,015 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (10) Consists of 120,228 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (11) Consists of (i) 128,855 shares of Common Stock, (ii) 1,618 restricted stock units vested within 60 days of April 14, 2017, and (iii) 684,564 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (12) Consists of (i) 87,272 shares of Common Stock, (ii) 918 restricted stock units vested within 60 days of April 14, 2017, and (iii) 545,655 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.
- (13) Includes (i) 112,217 restricted stock units vested within 60 days of April 14, 2017 and (ii) 3,303,238 options to purchase shares of Common Stock exercisable within 60 days of April 14, 2017.

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

Change of Control Agreements with Executive Officers

Our current executive officers, excluding our Chief Executive Officer, have Second Amended and Restated Change of Control and Severance Agreements that provide for certain benefits in the event of a Change of Control. In addition, our Chief Executive Officer's employment agreement provides for certain benefits in the event of a Change of Control. The above referenced agreements recognize that there may be periods where another company, entity or individual considers the possibility of acquiring the Company or that a change in our Board may otherwise occur (collectively known as a Change of Control), with or without the approval of our Board. These agreements recognize that such an event may cause a distraction to employees, which may in turn cause employees to consider alternative employment opportunities. The Board determined that it was in the best interest of the Company to give such employees an incentive to continue their employment during periods when the threat or occurrence of a Change of Control may exist. These agreements are discussed in more detail in the sections entitled "Compensation and Discussion Analysis—Employment Agreement" and "Potential Payments Upon Termination or Change of Control for each Named Executive Officer" found elsewhere in this Amendment.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. These agreements require us to indemnify such individuals, to the fullest extent permitted by Delaware law, for certain liabilities to which they may become subject as a result of their affiliation with us.

Review, Approval or Ratification of Transactions with Related Parties

We, or one of our subsidiaries, may occasionally enter into transactions with certain "related parties." Related parties include our executive officers, directors, nominees for directors, or 5% or more beneficial owners of our Common Stock and immediate family members of these persons. We refer to transactions in which the related party has a direct or indirect material interest as "related party transactions." Each related party transaction must follow the procedures set forth in the Company's Code of Business Conduct and Ethics and be reviewed and approved by the Audit Committee prior to the entering into of such transaction.

The Audit Committee considers all relevant factors when determining whether to approve a related party transaction including, without limitation, the following:

- the extent of the related party's interest in the related party transaction;
- the aggregate value of the related party transaction;
- the benefit to the Company; and
- whether the transaction involves the provision of goods or services to the Company that are available from unaffiliated third parties and whether the transaction is on terms and made under circumstances that are at least as favorable to the Company as would be available in comparable transactions with or involving unaffiliated third parties.

Board Independence

As required under the applicable listing standards of the NASDAQ Stock Market, a listed company's board of directors must affirmatively determine that a majority of its directors are "independent," as defined by such listing standards. That definition includes a series of objective tests, including that the director is not an employee of the company and has not engaged in various types of business dealings with the company. Additionally, the board of directors must make a subjective

determination as to each director that no relationship exists that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Consistent with these requirements, our Board has determined that five of our six directors each satisfy the director independence standards of the NASDAQ Stock Market. Our Board has also determined that Seth H. Z. Fischer, our Chief Executive Officer, is not independent by virtue of his employment with the Company. Mr. Fischer is not a member of any of the committees of our Board, each of which is composed of only independent directors.

Item 14. Principal Accounting Fees and Services

Principal Accountant Fees and Services

The Audit Committee engaged OUM & Co. LLP, or OUM, as our independent registered public accounting firm beginning with the fiscal year ended December 31, 2005. The following table presents fees for professional services rendered by OUM for the audit of our annual financial statements for fiscal years 2016 and 2015 and fees billed for audit-related services, tax services and all other services rendered by OUM for these periods:

	2016	2015
Audit Fees(1)	\$ 458,166	\$ 496,519
Audit-Related Fees(2)		
Tax Fees(3)	—	
All Other Fees(4)		
Total Fees	\$ 458,166	\$ 496,519

- (1) Audit Fees: This category consists of fees for the audit of our annual financial statements, review of the financial statements included in our quarterly reports on Form 10-Q and services that are normally provided by the independent auditors in connection with regulatory filings or engagements, and for attestation services related to Sarbanes-Oxley compliance for those fiscal years. This category also includes advice on audit and accounting matters that arose during, or as a result of, the audit or the review of interim financial statements.
- (2) Audit-Related Fees: There were no audit-related fees billed by OUM during these periods.
- (3) Tax Fees: There were no tax fees billed by OUM during these periods.
- (4) All Other Fees: There were no other fees billed by OUM during these periods.

Pre-Approval Policy and Procedures

The Audit Committee reviews and pre-approves all audit and non-audit services that may be provided by the independent registered public accounting firm, or Independent Auditor, during a specified period without the need to obtain specific pre-approval from the Audit Committee. The Independent Auditor provides an annual engagement letter to the Audit Committee with a reasonably detailed description of class of services proposed to be provided by the Independent Auditor during the period covered by the engagement letter and related estimated fees, and the Audit Committee pre-approves such engagement letter as appropriate. By approval of the engagement letter, the services in that engagement letter will have specific pre-approval. The services may include audit, audit-related, tax and all other services, and such service or class of services is subject to the pre-approved limit. Pre-approval is generally provided for up to one year, and the Audit Committee may periodically revise the amount and/or list of services that have received class pre-approval as necessary. Once such services

have been rendered by the Independent Auditor and approved by the Audit Committee, the pre-approved limits of the annual engagement letter are re-established. If it is anticipated that the service will exceed the annual pre-approved limits, prior to commencing the audit or other permitted non-audit service, the Audit Committee will pre-approve the particular service on a case-by-case basis. No service that is absent from the record of class-approved services in the annual engagement letter may be commenced without specific pre-approval. The Audit Committee has delegated the authority to grant pre-approvals to the Audit Committee Chairman when the full Audit Committee is unable to do so. Such pre-approvals are then reviewed by the full Audit Committee at its next regular meeting. The Independent Auditor and our senior management periodically report to the Audit Committee regarding the extent of services provided by the Independent Auditor and the related fees for the services performed, as needed. In 2016, all audit services were pre-approved and reviewed in accordance with our policy; in 2016, there were no non-audit services.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The financial statements, financial statement schedules and exhibits listed in the exhibit index of the Original Filing and the exhibits listed in the exhibit index of this Amendment are filed with, or incorporated by reference in, this Amendment.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Amendment to be signed on its behalf by the undersigned, thereunto duly authorized:

VIVUS, INC., a Delaware Corporation

By: /s/ SETH H. Z. FISCHER

Seth H. Z. Fischer Chief Executive Officer (Principal Executive Officer)

Date: April 26, 2017

VIVUS, INC. AMENDMENT NO. 1 TO ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2016 EXHIBIT INDEX

Exhibit Number	Description
31.3	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities
	Exchange Act of 1934, as amended
31.4	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934, as amended

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Seth H. Z. Fischer, Chief Executive Officer, certify that:

- 1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of VIVUS, Inc. for the year ended December 31, 2016; 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.

Date: April 26, 2017

By: /s/ SETH H. Z. FISCHER

Name:Seth H. Z. FischerTitle:Chief Executive Officer

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Exhibit 31.3

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark K. Oki, Chief Financial Officer and Chief Accounting Officer, certify that:

- 1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of VIVUS, Inc. for the year ended December 31, 2016; 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.

Date: April 26, 2017

By: /s/ MARK K. OKI

Name:Mark K. OkiTitle:Chief Financial Officer and
Chief Accounting Officer

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Exhibit 31.4

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002