



Neurocrine
BIOSCIENCES

2016 ANNUAL REPORT



Working as a team, Neurocrine’s R&D and clinical development groups possess the skills and experience to identify, select and optimize new compounds, to screen for therapeutic development, and to advance these compounds efficiently through clinical trials.

PRODUCTS	INDICATION	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	COMMERCIAL
INGREZZA™ (valbenazine)	Tardive Dyskinesia					
Elagolix	Endometriosis					
Elagolix	Uterine Fibroids					
Opicapone	Parkinson’s Disease					
INGREZZA (valbenazine)	Tourette Syndrome					
NBI-640756	Essential Tremor					
NBI-74788	Classic Congenital Adrenal Hyperplasia					
Neurological Neuropsychiatric	Movement Disorders, Bipolar Disorder and Schizophrenia					
CNS Disorders	Epilepsy, Essential Tremor, Pain, Other Indications					

We discover and develop innovative and life-changing pharmaceuticals, in diseases with high unmet medical needs, through our novel R&D platform, focused on neurologic, psychiatric and endocrine based diseases and disorders. We have recently received FDA approval of INGREZZA™ (valbenazine) for the treatment of tardive dyskinesia. Our three lead late-stage clinical programs are: elagolix, a gonadotropin-releasing hormone antagonist for women’s health that is partnered with AbbVie Inc.; opicapone, a novel, once-daily, peripherally-acting, highly-selective catechol-o-methyltransferase inhibitor under investigation as adjunct therapy to levodopa in Parkinson’s patients; and INGREZZA for the treatment of Tourette syndrome.

Dear Fellow Shareholders,

April 11, 2017. This date changed the lives of hundreds of thousands of people suffering from the debilitating effects of tardive dyskinesia (TD). It was also a transformative day for Neurocrine, moving a purely R&D company into a commercial organization. This is a day that has been much anticipated by our Company and for which we have been diligently preparing. From the filing of the New Drug Application (NDA) with the FDA last summer to waiting by the computer for the INGREZZA™ (valbenazine) capsules FDA approval letter last week, it has been arguably the busiest and most productive period of time in Neurocrine's history.

The early part of this past year had the company focused on submission of a high quality NDA to the FDA for INGREZZA to treat TD. In August we submitted the comprehensive NDA with over 20 clinical studies and a thousand patients. In October, the FDA accepted our NDA to file and granted us Priority Review, shortening the review time from twelve to eight months. The interactions with the FDA during this eight month period were, for lack of a better word, outstanding. Their professional approach to our submission and the diligence and pace with which they reviewed the extensive dataset was impressive. While our regulatory and clinical teams were filing and interacting with the FDA, the rest of the organization was focused on preparing for commercial launch of INGREZZA.

For all of 2016, our Medical Affairs team, consisting of Medical Science Liaisons and our Medical Communications group, engaged with health care professionals nationwide to increase both the awareness and the diagnosis of TD. They have been active on the medical conference circuit where Neurocrine presented 26 abstracts at a range of psychiatric and neurologic meetings both nationally and regionally. In particular, at the American Academy of Neurology meeting in Toronto last April, we were granted the highly coveted plenary session to present INGREZZA's Phase III clinical trial data. We had a significant presence at the American Psychiatric Association meeting with multiple presentations and a scientific symposia detailing the safety and efficacy of INGREZZA.

We have also been diligently creating a marketing strategy to ensure a successful launch of INGREZZA. Early in 2016 we built our commercial infrastructure and recruited a talented team to lead our sales and marketing organization, including the brand team, sales operations, training, and a market access group. Early last year we launched our TD educational campaign, "Take On TD" directed to health care professionals, centered on our informational website, takeontd.com, and supplemented with disease state booths and sponsored educational symposia at major national medical meetings. The TD educational campaign has recently been expanded to also include content which would be of critical use for TD patients as well as their caregivers.

When considering any approved pharmaceutical product, a key factor for product success and utilization is ensuring patient access. During 2016, our market access team began meeting with health plan decision makers to introduce Neurocrine and TD and to discuss coverage policies regarding new drugs. They have met with both private and

public insurers at the national and regional level to discuss the promise of INGREZZA. As a primary focus of Neurocrine, we are committed to all TD patients having access to this incredible drug. We will work with payors to help them understand the appropriate treatment candidates for INGREZZA and develop coverage policies that enable access. We have also put in place a personalized patient support services hub we call INBRACE™. The INBRACE program is a concierge-type support service that provides a suite of informational and other support services for patients that are prescribed INGREZZA. It will offer reimbursement support, co-pay assistance for eligible patients, a trial supply of INGREZZA, phone support from psychiatric nurses, and a patient assistance program which provides no-cost medication for qualifying patients.

In addition to preparing for commercialization our R&D pipeline continues to grow and mature. We recently released data from a Phase II trial of valbenazine in adults with Tourette syndrome. While that trial did not meet its primary endpoint, it did provide important information on both trial conduct and patient recruitment that will be invaluable for our overall Tourette program. We have a second Phase II trial of valbenazine in children and adolescents with Tourette's which will read out during the spring of 2017. We applied our learnings from the adult Tourette study to this study and anxiously await the results. We will then work with the FDA to determine the pathway for the Phase III program in Tourette's. Additionally, our partner Abbvie has completed the one-year dosing portion of the second endometriosis Phase III trial of elagolix. Abbvie anticipates filing the elagolix endometriosis NDA in the third quarter of 2017. In early 2016, Abbvie also initiated two Phase III trials of elagolix in uterine fibroid patients and topline efficacy and safety results from this program are expected in late 2017.

While our internal R&D has been very productive, having discovered and developed both INGREZZA and elagolix, we continue to be active in looking for outside opportunities. In February we announced a collaboration with the Portuguese company, Bial Pharmaceuticals, for their Parkinson's drug, opicapone. Bial discovered and developed opicapone and it was approved this past summer by the European regulatory authorities. Neurocrine has exclusive rights to develop and commercialize this important medicine in both the United States and Canada.

In closing, I would like to thank our employees for their dedication and our investors for your support over the years. This transformation into a commercial organization has been a long time in the making. There have been fits and starts, highs and lows, frustration and joy. Through all of it you and the company persevered and we now look forward to the next evolution of Neurocrine.

Sincerely,



Kevin Gorman
Chief Executive Officer

NEUROCRINE BIOSCIENCES, INC.
12780 El Camino Real
San Diego, CA 92130

Notice of Annual Meeting of Stockholders

To Be Held on May 22, 2017

TO THE STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that the 2017 Annual Meeting of Stockholders of Neurocrine Biosciences, Inc., a Delaware corporation (the "Company"), will be held on May 22, 2017, at 10:30 a.m., local time, at the Company's corporate headquarters located at 12780 El Camino Real, San Diego, California 92130, for the following purposes as more fully described in the Proxy Statement accompanying this Notice:

1. The election of the three nominees for Class III Director named herein to the Board of Directors to serve for a term of three years;
2. An advisory vote on the compensation paid to the Company's named executive officers;
3. An advisory vote on the frequency of advisory voting on the compensation paid to the Company's named executive officers;
4. To approve an amendment to the Company's 2011 Equity Incentive Plan to increase the number of shares of common stock reserved for issuance thereunder from 15,500,000 to 17,000,000;
5. The ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2017; and
6. To transact such other business as may properly come before the Annual Meeting of Stockholders or any continuation, adjournment or postponement thereof.

Only stockholders of record at the close of business on March 31, 2017 are entitled to receive notice of and to vote at the Annual Meeting of Stockholders.

All stockholders are cordially invited to attend the Annual Meeting of Stockholders in person. However, to assure your representation at the Annual Meeting of Stockholders, you are urged to mark, sign, date and return the enclosed proxy card as promptly as possible in the postage prepaid envelope, or vote by telephone or internet (instructions have been provided on your proxy card). Stockholders attending the Annual Meeting may vote in person even if they have returned a proxy.

By Order of the Board of Directors,



Darin Lippoldt
Chief Legal Officer and Corporate Secretary

San Diego, California
April 20, 2017

**Important Notice Regarding the Availability of Proxy Materials for the Stockholders'
Meeting to be Held on May 22, 2017 at 10:30 a.m. Local Time at
12780 El Camino Real, San Diego, California 92130.**

**The proxy statement and annual report to stockholders are available at
www.proxyvote.com. Please have the control number on your proxy card available.**

[THIS PAGE INTENTIONALLY LEFT BLANK]

NEUROCRINE BIOSCIENCES, INC.

**12780 El Camino Real
San Diego, California 92130**

PROXY STATEMENT

The enclosed Proxy is solicited on behalf of Neurocrine Biosciences, Inc., a Delaware corporation (the “Company” or “Neurocrine”), for use at its 2017 Annual Meeting of Stockholders (the “Annual Meeting”) to be held on May 22, 2017 beginning at 10:30 a.m., local time, or at any continuations, postponements or adjournments thereof for the purposes set forth in this proxy statement and the accompanying Notice of Annual Meeting of Stockholders. The Annual Meeting will be held at the Company’s corporate headquarters, located at 12780 El Camino Real, San Diego, California 92130. The Company’s phone number is (858) 617-7600.

This proxy statement is being first mailed on or about April 20, 2017 to all stockholders entitled to vote at the Annual Meeting.

ABOUT THE ANNUAL MEETING

What is the purpose of the Annual Meeting?

At the Annual Meeting, stockholders will act upon the matters outlined in the Notice of Annual Meeting of Stockholders on the cover page of this proxy statement, including the election of the three nominees for Class III Director named herein, an advisory vote on the compensation paid to the Company’s named executive officers, an advisory vote on the frequency of advisory voting on the compensation paid to the Company’s named executive officers, approval of an amendment increasing the number of shares of common stock reserved for issuance under the Company’s 2011 Equity Incentive Plan from 15,500,000 to 17,000,000, and ratification of the appointment of Ernst & Young LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2017. In addition, following the Annual Meeting, management will report on the performance of the Company and respond to questions from stockholders.

Who can attend the Annual Meeting?

All stockholders of record at the close of business on March 31, 2017 (the “Record Date”), or their duly appointed proxies, may attend the Annual Meeting. If you attend, please note that you may be asked to present valid picture identification, such as a driver’s license or passport. Cameras, recording devices and other electronic devices will not be permitted at the Annual Meeting.

Please also note that if you hold your shares in “street name” (that is, through a broker or other nominee), you will need to bring a copy of a brokerage statement reflecting your stock ownership as of the record date and check in at the registration desk at the Annual Meeting.

Who is entitled to vote at the Annual Meeting?

Stockholders of record at the close of business on the Record Date are entitled to receive notice of and to participate in the Annual Meeting. At the close of business on the Record Date, 87,519,910 shares of the Company’s common stock, \$0.001 par value per share, were issued and outstanding. If you were a stockholder of record on that date, you will be entitled to vote all of the shares that you held on that date at the Annual Meeting, or any continuations, postponements or adjournments of the Annual Meeting.

Each outstanding share of the Company's common stock will be entitled to one vote on each proposal considered at the Annual Meeting.

What constitutes a quorum? What are broker non-votes? What are advisory votes?

The presence at the Annual Meeting, in person or by proxy, of the holders of a majority of the aggregate voting power of the common stock outstanding on the Record Date will constitute a quorum, permitting the Company to conduct its business at the Annual Meeting. As of the Record Date, 87,519,910 shares of common stock, representing the same number of votes, were outstanding. Thus, the presence of the holders of common stock representing at least 43,759,956 shares will be required to establish a quorum. The presence of a quorum will be determined by the Inspector of Elections (the "Inspector").

Proxies received but marked as abstentions, as well as "broker non-votes," will be included in the calculation of the number of shares considered to be present at the Annual Meeting. Broker non-votes occur when a holder of shares in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange (the "NYSE"), "non-routine" matters are matters that may substantively affect the rights or privileges of stockholders, such as mergers, stockholder proposals and elections of directors, even if not contested. In addition, as required by Section 957 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, advisory votes on executive compensation and on the frequency of advisory votes on executive compensation are non-routine matters for which brokers do not have discretionary authority to vote shares held by account holders. Only ratification of our independent registered public accounting firm under Proposal Five is considered a routine matter.

The votes on Proposals Two and Three are advisory. Neither the approval nor the disapproval of Proposal Two or the outcome of the vote on Proposal Three will be binding on the Company or the Board of Directors and neither will create or imply any change to the fiduciary duties of the Board of Directors. However, the Company and the Board of Directors will consider the results of the advisory votes on Proposal Two and Proposal Three in making future decisions about compensation of the Company's named executive officers and frequency of future advisory votes on the compensation paid to the Company's named executive officers.

How do I vote?

If you complete and properly sign the accompanying proxy card and return it to the Company, it will be voted as you direct. If you are a registered stockholder (that is, if you hold your stock in certificate form and attend the Annual Meeting), you may deliver your completed proxy card in person. "Street name" stockholders who wish to vote at the Annual Meeting will need to obtain a proxy form from the institution that holds their shares.

The cost of solicitation of proxies will be borne by the Company. The Company will reimburse expenses incurred by brokerage firms and other persons representing beneficial owners of shares in forwarding solicitation material to beneficial owners. To assist in soliciting proxies (votes), the Company may retain a professional proxy solicitation firm, at an approximate cost of \$10,000. Proxies also may be solicited by certain of the Company's directors, officers and regular employees, without additional compensation, personally, by telephone or by other appropriate means.

Can I vote by telephone or electronically?

If you are a registered stockholder you may vote by telephone, or electronically through the Internet, by following the instructions included with your proxy card. If your shares are held in "street name," please check your proxy card or contact your broker or nominee to determine whether you will be able to vote by telephone or electronically. The deadline for voting by telephone or electronically is 11:59 p.m., Eastern Time, on May 21, 2017.

Can I change my vote after I return my proxy card?

Yes. Even after you have submitted your proxy, you may change your vote at any time before the proxy is exercised by filing with the Corporate Secretary of the Company either a notice of revocation or a duly executed proxy bearing a later date. Your proxy will also be revoked if you attend the Annual Meeting and vote in person. Attendance at the Annual Meeting will not by itself revoke a previously granted proxy.

What does it mean if I receive more than one set of proxy materials?

If you receive more than one set of proxy materials, your ordinary shares are registered in more than one name or are registered in different accounts. Please complete, sign and return each proxy card to ensure that all of your shares are voted.

What are the Board of Directors' recommendations?

Unless you give other instructions on your proxy card, the persons named as proxy holders on the proxy card will vote in accordance with the recommendations of the Board of Directors. The Board of Directors' recommendation is set forth together with the description of each item in this proxy statement. In summary, the Board of Directors recommends a vote:

- *for* election of the three nominees for Class III Director named herein (see Proposal One);
- *for* an advisory vote on the compensation paid to the Company's named executive officers (see Proposal Two);
- *for* annual advisory voting on the compensation paid to the Company's named executive officers (see Proposal Three);
- *for* approval of the amendment to the Company's 2011 Equity Incentive Plan to increase the number of shares of common stock reserved for issuance thereunder from 15,500,000 to 17,000,000 (see Proposal Four); and
- *for* ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2017 (see Proposal Five).

With respect to any other matter that properly comes before the meeting, the proxy holders will vote as recommended by the Board of Directors or, if no recommendation is given, in their own discretion.

What vote is required to approve each item?

Election of Directors. The affirmative vote of a plurality of the votes cast at the Annual Meeting is required for the election of directors. A properly executed proxy marked "WITHHOLD AUTHORITY" with respect to the election of one or more directors will not be voted with respect to the director or directors indicated, although it will be counted for purposes of determining whether there is a quorum.

Other Items. For each other item, other than Proposal Three, the affirmative vote of the holders of a majority of the shares represented in person or by proxy and entitled to vote on the item will be required for approval. For Proposal Three, the frequency receiving the highest number of affirmative votes of the shares represented in person or by proxy and entitled to vote on the item will be considered the frequency preferred by the stockholders. A properly executed proxy marked "ABSTAIN" with respect to any such matter will not be voted, although it will be counted for purposes of determining the number of shares represented in person or by proxy at the Annual Meeting. Accordingly, an abstention will have the effect of a negative vote for each other item, other than Proposal Three. If you hold your shares in "street name" through a broker or other nominee, your broker or nominee will not be permitted to exercise voting discretion with respect to each of the other matters to be acted upon, other than Proposal Five. Thus, if you do not give your broker or nominee specific instructions,

your shares will not be voted on and will not be counted for any other matter to be acted upon, other than Proposal Five. Shares represented by such “broker non-votes” will, however, be counted in determining whether there is a quorum.

Who counts the votes?

Votes cast by proxy or in person at the Annual Meeting will be tabulated by the Inspector.

What proxy materials are available on the Internet?

The proxy statement and annual report to stockholders are available on the Internet at www.proxyvote.com. Please have the control number on your proxy card available.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an amended Form 8-K to publish the final results.

STOCK OWNERSHIP

Who are the principal stockholders, and how much stock does management own?

The following table sets forth the beneficial ownership of the Company's common stock as of March 15, 2017 by (i) each of the executive officers named in the table under the heading "Summary Compensation Table," (ii) each current director, (iii) all current directors and executive officers as a group and (iv) all persons known to the Company to be the beneficial owners of more than 5% of the Company's common stock. The table is based upon information supplied by our executive officers, directors and principal stockholders and a review of Schedules 13D and 13G, if any, filed with the Securities and Exchange Commission (the "SEC"). A total of 87,519,910 shares of the Company's common stock were issued and outstanding as of March 15, 2017.

<u>Name and Address of Beneficial Owner (1)</u>	<u>Number of Shares of Common Stock Owned (2)</u>	<u>Number of Shares of Common Stock Acquirable Within 60 Days (3)</u>	<u>Total Number of Shares of Common Stock Beneficially Owned (4)</u>	<u>Percent Ownership</u>
FMR LLC (5) 245 Summer Street, Boston, MA 02109	12,950,296	—	12,950,296	14.8%
T. Rowe Price Associates, Inc. (6) 100 East Pratt Street, Baltimore, MD 21202	5,980,163	—	5,980,163	6.8%
BlackRock, Inc. (7) 55 East 52 nd Street, New York, NY 10022	5,255,737	—	5,255,737	6.0%
The Vanguard Group (8) 100 Vanguard Blvd., Malvern, PA 19355	6,442,210	—	6,442,210	7.4%
Kevin C. Gorman, Ph.D.	314,703	960,352	1,275,055	1.4%
Timothy P. Coughlin (9)	137,961	335,028	472,989	*
Christopher F. O'Brien, M.D.	37,038	425,545	462,583	*
Eric Benevich	1,222	48,603	49,825	*
Haig P. Bozigian, Ph.D.	117,666	417,452	535,118	*
William H. Rastetter, Ph.D.	14,250	126,493	140,743	*
Gary A. Lyons	282,066	98,744	380,810	*
Corinne H. Nevinny	25,555	113,744	139,299	*
Joseph A. Mollica, Ph.D.	37,354	118,744	156,098	*
George J. Morrow	—	34,855	34,855	*
Richard F. Pops	16,472	113,744	130,216	*
Alfred W. Sandrock, Jr., M.D., Ph.D.	—	35,966	35,966	*
Stephen A. Sherwin, M.D.	43,879	98,744	142,623	*
All current executive officers and directors as a group (17 persons)	1,069,576	3,275,225	4,344,801	4.8%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of the Company's common stock as of March 15, 2017.

- (1) The address of each beneficial owner named is c/o Neurocrine Biosciences, Inc., 12780 El Camino Real, San Diego, CA 92130, unless otherwise indicated.
- (2) Represents shares of common stock owned, excluding shares of common stock subject to stock options that are listed under the heading "Number of Shares of Common Stock Acquirable Within 60 Days," by the named parties as of March 15, 2017.
- (3) Shares of common stock subject to stock options currently exercisable or exercisable within 60 days of March 15, 2017, regardless of exercise price, are deemed to be outstanding for computing the percentage ownership of the person holding such options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person.

- (4) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as indicated by footnote, and subject to community property laws where applicable, the Company believes that the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.
- (5) Based on Amendment No. 7 to Schedule 13G filed by FMR LLC (“FMR”) on February 14, 2017, reporting ownership as of December 31, 2016. According to such filing, FMR beneficially owns 12,950,296 shares of common stock and has sole voting power as to 1,419,967 shares of common stock. Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the common stock held by FMR.
- (6) Based on Amendment No. 5 to Schedule 13G filed by T. Rowe Price Associates, Inc. (“Price Associates”) filed on February 7, 2017, reporting ownership as of December 31, 2016. According to such filing, Price Associates beneficially owns 5,980,163 shares of common stock and has sole voting power as to 1,141,064 shares of common stock. These securities are owned by various individual and institutional investors which Price Associates serves as an investment adviser with power to direct investments and/or sole power to vote the securities. For the purposes of the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), Price Associates is deemed to be a beneficial owner of such securities; however, Price Associates expressly disclaims that it is, in fact, the beneficial owner of such securities.
- (7) Based on Amendment No. 4 to Schedule 13G filed by BlackRock, Inc. (“BlackRock”) on January 25, 2017, reporting ownership as of December 31, 2016. According to such filing, BlackRock beneficially owns 5,255,737 shares of common stock and sole voting power as to 4,963,323 shares of common stock. Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of shares of the common stock held by BlackRock. No one person’s interest in the common stock held by BlackRock is more than five percent of the Company’s total outstanding common stock.
- (8) Based on Amendment No. 1 to Schedule 13G filed by The Vanguard Group, Inc. (“Vanguard Group”) on February 10, 2017, reporting ownership as of December 31, 2016. According to such filing, Vanguard Group beneficially owns 6,442,210 shares of common stock and sole voting power as to 50,849 shares of common stock.
- (9) Mr. Coughlin resigned as our Chief Financial Officer effective February 15, 2017 (the “Resignation Date”), but he will remain an employee of the Company following the Resignation Date until December 31, 2017, or such earlier date that Mr. Coughlin’s employment with the Company terminates, in order to provide transition services to his successor and other Company employees.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company’s officers and directors, and persons who beneficially own 10% or greater of a registered class of the Company’s equity securities, to file reports of ownership on Form 3 and reports of changes in ownership on Form 4 or Form 5 with the SEC. Such officers, directors and 10% or greater stockholders are also required by SEC rules to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of the copies of such forms received by it, and written representations from certain reporting persons, the Company believes that its officers, directors and 10% or greater stockholders complied with all Section 16(a) filing requirements applicable to them during the fiscal year ended December 31, 2016.

BOARD OF DIRECTORS AND COMMITTEES

General

The Company's bylaws, as amended, provide that the Board of Directors will be comprised of nine directors. The Company's Certificate of Incorporation provides that the Board of Directors is divided into three classes. There are currently three directors in Class I (William H. Rastetter, Ph.D., Joseph A. Mollica, Ph.D. and George J. Morrow), three directors in Class II (Corinne H. Nevinny, Richard F. Pops and Stephen A. Sherwin, M.D.), and three directors in Class III (Kevin C. Gorman, Ph.D., Gary A. Lyons and Alfred W. Sandrock, Jr., M.D., Ph.D.). With the exception of Kevin C. Gorman, Ph.D., who is the Chief Executive Officer of the Company, all current members of the Board of Directors meet the definition of "independent director" under the Nasdaq Stock Market qualification standards.

The directors in Class III hold office until the 2017 Annual Meeting of Stockholders, the directors in Class I hold office until the 2018 Annual Meeting of Stockholders and the directors in Class II hold office until the 2019 Annual Meeting of Stockholders (or, in each case, until their earlier resignation, removal from office, or death). After each such election, the directors in each such case will then serve in succeeding terms of three years and until a successor is duly elected and qualified. Officers of the Company serve at the discretion of the Board of Directors. There are no family relationships among the Company's directors and executive officers.

The term of office for directors Kevin C. Gorman, Ph.D., Gary A. Lyons and Alfred W. Sandrock, Jr., M.D., Ph.D. will expire at the 2017 Annual Meeting. At the 2017 Annual Meeting, the stockholders will elect three Class III directors for a term of three years.

Director Biographies

Kevin C. Gorman, Ph.D. has been employed with the Company since 1993. He was appointed President and Chief Executive Officer in January 2008 after having served as Executive Vice President and Chief Operating Officer since September 2006 and prior to that, as Executive Vice President and Chief Business Officer and Senior Vice President of Business Development. He currently serves as Chief Executive Officer and has served on the Board of Directors since January 2008. From 1990 until 1993, Dr. Gorman was a principal of Avalon Medical Partners, L.P. where he was responsible for the early stage founding of the Company and several other biotechnology companies such as Onyx Pharmaceuticals, Inc., Metra Biosystems, Inc., Idun Pharmaceuticals, Inc. and ARIAD Pharmaceuticals, Inc. Dr. Gorman received his Ph.D. in immunology and M.B.A. in Finance from the University of California, Los Angeles and did further post-doctoral training at The Rockefeller University.

William H. Rastetter, Ph.D. has served on the Board of Directors since February 2010 and as Chairman of the Board of Directors since May 2011. Currently, he serves as the Chairman of the Board of Directors for each of Fate Therapeutics, a company focused on stem cell research, and Cerulean Pharma, Inc., a company focused on innovative oncology therapies, both of which are publicly traded, and Grail, Inc., a privately held company using next-generation sequencing and machine learning to develop cancer screening technologies. Dr. Rastetter also serves on the Board of Directors at Regulus Therapeutics, a company focused on RNA based therapeutics. Dr. Rastetter served as Chairman of the Board of Directors of Illumina, Inc., a biotechnology company, from January 2005 to January 2016, and served on its Board of Directors from November 1999 to January 2016. He was a founder of Receptos, Inc. in 2009 and served as its Chairman until the sale of the company to Celgene in 2015. He was a partner in the venture capital firm, Venrock, from 2006 through early 2013 and was Executive Chairman of Biogen Idec, Inc. from 2003 to 2005. Earlier, he served as Chairman and Chief Executive Officer of IDEC Pharmaceuticals Corporation until its merger with Biogen in 2003; he joined IDEC Corporation as its Chief Executive Officer at the company's founding in 1986. From 1984 to 1986, Dr. Rastetter was Director of Corporate Ventures at Genentech, where from 1982 to 1984 he held scientific positions. Dr. Rastetter held various faculty positions at the Massachusetts Institute of Technology and Harvard University and is an Alfred P. Sloan Fellow. Dr. Rastetter holds a S.B. in Chemistry from the Massachusetts Institute of Technology and received his M.A. and Ph.D. in Chemistry from Harvard University.

Gary A. Lyons has served on the Board of Directors since joining Neurocrine in February 1993. Mr. Lyons served as the President and Chief Executive Officer of the Company from February 1993 through January 2008. Prior to joining the Company, Mr. Lyons held a number of senior management positions at Genentech, Inc., including Vice President of Business Development and Vice President of Sales. Mr. Lyons currently serves as Chairman of the Board of Directors for each of Rigel Pharmaceuticals, Inc., a biotechnology company focused on developing drugs for the treatment of inflammatory/autoimmune and metabolic diseases, and Retrophin, Inc., a company focused on developing drugs for the treatment of debilitating and often life-threatening diseases. Mr. Lyons also serves on the Board of Directors of Vical Incorporated, a biotechnology company focused on the prevention and treatment of serious or life-threatening diseases and Cytori Therapeutics, Inc., a company focused on stem cell therapies. Mr. Lyons was previously a director of PDL BioPharma, Inc., Poniard Pharmaceuticals, Inc., Neurogesx, KaloBios Pharmaceuticals, Inc., and Facet Biotech Corporation. Mr. Lyons holds a B.S. in marine biology from the University of New Hampshire and an M.B.A. from Northwestern University's J.L. Kellogg Graduate School of Management.

Joseph A. Mollica, Ph.D. has served on the Board of Directors since June 1997 and as Chairman of the Board from 1998 until 2011. From 2004 to 2008, Dr. Mollica served as the Chairman of the Board of Pharmacoepia Drug Discovery, Inc., a biopharmaceutical company focused on drug discovery and development. From 1994 to 2004, Dr. Mollica served as the Chairman of the Board of Directors, President and Chief Executive Officer of Accelrys, Inc., the former parent of Pharmacoepia Drug Discovery. From 1987 to December 1993, Dr. Mollica served as Vice President, Medical Products of DuPont Company and then as President and CEO of DuPont Merck Pharmaceutical Company from 1991 to 1993. At Ciba-Geigy Ltd., where he was employed from 1966 to 1986, he served in a variety of positions of increasing responsibility, rising to Senior Vice President of Ciba-Geigy's Pharmaceutical Division. Dr. Mollica was previously a director of Cytogen Corporation, Celator Pharmaceuticals, Inc., Redpoint Bio Corporation and Genencor International. Over the past 20 years, Dr. Mollica has served on the boards of more than a dozen public, private and not-for-profit boards. He received his B.S. from the University of Rhode Island, his M.S. and Ph.D. from the University of Wisconsin and his Sc.D.h.c. from the University of Rhode Island.

George J. Morrow has served on the Board of Directors since October 2015. He previously served as Executive Vice President, Global Commercial Operations at Amgen Inc., a global biotechnology company, from 2003 until his retirement in 2011, and then served as a consultant to Amgen Inc. from February 2011 until January 2013. Mr. Morrow also served as Amgen's Executive Vice President of Worldwide Sales and Marketing from 2001 to 2003. From 1992 to 2001, Mr. Morrow held multiple leadership positions at GlaxoSmithKline Inc. and its subsidiaries, last serving as President and Chief Executive Officer of Glaxo Wellcome Inc. Mr. Morrow currently serves on the Board of Directors of Align Technology, Inc., Otonomy, Inc. and Vical Incorporated. Mr. Morrow has served previously on boards for Glaxo Wellcome, Inc., Human Genome Sciences, Inc., Safeway, Inc., the Johns Hopkins School of Public Health, National Commerce Bank and the Duke University Fuqua School of Business. Mr. Morrow holds a B.S. in chemistry from Southampton College, Long Island University, an M.S. in biochemistry from Bryn Mawr College and an M.B.A. from Duke University.

Corinne H. Nevinny has served on the Board of Directors since June 2004. Ms. Nevinny is currently a General Partner of LMNVC LLC, a privately held venture firm. From 2003 to 2010, Ms. Nevinny held various positions at Edwards Lifesciences, Inc., the global leader in the science of heart valves and hemodynamic monitoring. She served as Corporate Vice President and the General Manager of the Cardiac Surgery Systems and Vascular business units, was responsible for Edwards' global operations and served as Chief Financial Officer and Treasurer. Before joining Edwards in 2003, Ms. Nevinny was Vice President, Chief Financial Officer of Tularik, Inc., a company involved in the discovery and development of drugs based on gene regulation, which was sold to Amgen, Inc. in 2004. Prior to joining Tularik, she was Executive Director-Health Care Group at Warburg Dillon Read LLC, an investment bank. Ms. Nevinny was previously on the Board of Directors of Onyx Pharmaceuticals, Inc., a biopharmaceutical company focused on the treatment of cancer that was sold to Amgen in 2013, and the Board of Directors of Avanir Pharmaceuticals, Inc., a biopharmaceutical company focused on central nervous system disorders that was acquired by Otsuka Pharmaceutical in 2015. Ms. Nevinny received her

undergraduate degree in industrial engineering from Stanford University and her Master's degree in business administration from Harvard Business School.

Richard F. Pops has served on the Board of Directors since April 1998. Mr. Pops is the Chairman and Chief Executive Officer of Alkermes, Inc. He joined Alkermes as Chief Executive Officer in February 1991. Under his leadership, Alkermes has grown from a privately held research-based company with 25 employees to an international, publicly traded pharmaceutical company with more than 1,300 employees. In addition to Alkermes, he currently serves on the Board of Directors of Acceleron Pharma, Inc., a biotechnology company focused on musculoskeletal and metabolic therapeutics; Epizyme Corporation, a biotechnology company focused on epigenetics; the Biotechnology Industry Organization; and the Pharmaceutical Research and Manufacturers of America (PhRMA). He has previously served on the board of directors of two other publicly traded biopharmaceutical companies, Sirtris Pharmaceuticals from 2004 to 2008, and CombinatoRx, Incorporated from 2001 to 2009. Mr. Pops also served on the board of directors of Reliant Pharmaceuticals, a privately held pharmaceutical company purchased by GlaxoSmithKline in 2007, and on the advisory board of Polaris Venture Partners. He was a member of the Harvard Medical School Board of Fellows through June 2012. In 2014 Mr. Pops was appointed to FasterCures' Value & Coverage Advisory Council, which is designed to provide guidance on fostering a coverage and reimbursement environment that incentivizes biomedical innovation and ensures that patients have meaningful access to life-saving therapies. He holds a B.A. in economics from Stanford University.

Alfred W. Sandroock, Jr., M.D., Ph.D. has served on our Board of Directors since September 2015. He has been employed in a number of executive roles with increasing responsibility at Biogen, Inc., a global biotechnology company, since 1998. He currently serves as Biogen's Executive Vice President, Neurology Discovery & Development Center, Neurodegeneration Therapeutic Area and Chief Medical Officer and has served in these positions since November 2015. Dr. Sandroock previously served as Biogen's Group Senior Vice President from May 2014 to October 2015 as well as Chief Medical Officer since February 2012. His former positions include Senior Vice President of Development Sciences, Senior Vice President of Neurology Research and Development, and Vice President of Clinical Development, Neurology. Dr. Sandroock received his B.A. in human biology from Stanford University, an M.D. from Harvard Medical School, and a Ph.D. in neurobiology from Harvard University. He completed an internship in medicine, a residency and chief residency in neurology, and a clinical fellowship in Neuromuscular Disease and Clinical Neurophysiology (electromyography) at Massachusetts General Hospital.

Stephen A. Sherwin, M.D. has served on the Board of Directors since April 1999. Dr. Sherwin currently divides his time between advisory work in the life science industry and patient care and teaching in his specialty of medical oncology. He is a Clinical Professor of Medicine at the University of California, San Francisco, and a volunteer Attending Physician in Hematology-Oncology at San Francisco General Hospital. Dr. Sherwin currently serves on the Board of Directors of Aduro Biotech, Inc., Biogen Inc., Rigel Pharmaceuticals, Inc., and Verastem, Inc. Previously Dr. Sherwin served on the Board of Vical Incorporated from 2013 to 2015 and was Chairman and Chief Executive Officer of Cell Genesys, Inc., a cancer immunotherapy company, from 1990 until the company's merger in 2009 with BioSante Pharmaceuticals (now ANI Pharmaceuticals). He was also a co-founder and chairman of Abgenix, Inc., an antibody company which was acquired by Amgen in 2006, and co-founder and Chairman of Ceregene, Inc., a gene therapy company which was acquired by Sangamo Biosciences in 2013. From 1983 to 1990, Dr. Sherwin held various positions in clinical research at Genentech Inc., most recently that of Vice President. Prior to 1983, he was on the staff of the National Cancer Institute. In addition, Dr. Sherwin previously served on the Board of Directors of the Biotechnology Industry Organization from 2001 to 2014 and as its Chairman from 2009 to 2011. Dr. Sherwin holds a B.A. in biology summa cum laude from Yale University and an M.D. from Harvard Medical School, and is board-certified in internal medicine and medical oncology.

CORPORATE GOVERNANCE

General

We have long believed that good corporate governance is important to ensure that Neurocrine is managed for the long-term benefit of its stockholders. We periodically review our corporate governance policies and practices. The Board of Directors has adopted Corporate Governance Guidelines which describe our corporate governance practices and address corporate governance issues such as Board composition, responsibilities and director qualifications. These guidelines are available at www.neurocrine.com.

What is the Board's leadership structure?

It is the Company's policy to separate the roles of Chief Executive Officer and Chairman of the Board. This separation recognizes the independent roles of the Board of Directors, Chairman of the Board and Chief Executive Officer. The Board of Directors sets Company strategy and provides oversight and accountability for the Chief Executive Officer and Company management. The Chairman of the Board presides over the Board of Directors and provides guidance to the Chief Executive Officer. The Chief Executive Officer and the balance of the Board of Directors set Company goals with the Chief Executive Officer providing leadership and day to day oversight in furtherance of those goals. The Company believes that separation of the Board of Directors and Company leadership reinforces the independence of the Board of Directors in its oversight of the business and affairs of the Company, and creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of the Board of Directors to monitor whether management's actions are in the best interests of the Company and its stockholders.

Are the members of the Board independent?

The Board of Directors annually reviews the independence of each of the directors. With the exception of Kevin C. Gorman, Ph.D., who is the Chief Executive Officer of Neurocrine, all current members of the Board of Directors meet the definition of "independent director" under the Nasdaq Stock Market qualification standards.

How often did the Board meet during fiscal 2016?

The Board of Directors held a total of four meetings during 2016. For 2016, the Board of Directors had an Audit Committee, a Compensation Committee, a Nominating/Corporate Governance Committee, and a Science and Medical Technology Committee. Charters for each of these committees have been established and approved by the Board of Directors and current copies of the charters for each of the committees have been posted on the Company's website at www.neurocrine.com. During 2016, no director attended fewer than 75% of the aggregate of the total meetings of the Board of Directors and no director attended fewer than 75% of the total number of meetings held by all committees of the Board of Directors on which such director served.

What are the various committees of the Board and which directors are on those committees?

The Company's Audit Committee is comprised entirely of directors who meet the independence requirements set forth in Nasdaq Stock Market Rule 5605(c)(2)(A). Information regarding the functions performed by the committee, its membership, and the number of meetings held during the fiscal year is set forth in the "Report of the Audit Committee," included in this annual proxy statement. The members of the Audit Committee are Corinne H. Nevinny, Richard F. Pops and Stephen A. Sherwin, M.D. The Board of Directors has determined that Corinne H. Nevinny, Richard F. Pops and Stephen A. Sherwin, M.D. are "audit committee financial experts" within the meaning of item 407(d)(5) of SEC Regulation S-K. The committee met four times during 2016.

The Company's Compensation Committee consists of directors Richard F. Pops, George J. Morrow and Joseph Mollica, Ph.D. This committee met seven times during 2016. The Compensation Committee reviews and

recommends to the Board of Directors the compensation of executive officers and other employees of the Company. Under its charter, the Compensation Committee may form, and delegate authority to, subcommittees as appropriate. Each of the current members of the Compensation Committee is an “independent director” as defined by Nasdaq Stock Market Rule 5605(a)(2).

The Company has a Nominating/Corporate Governance Committee currently comprised Stephen A. Sherwin, M.D., Joseph A. Mollica, Ph.D. and Alfred W. Sandroock, Jr. M.D., Ph.D., all of whom are “independent directors” as defined by Nasdaq Stock Market Rule 5605(a)(2). The Nominating/Corporate Governance Committee is responsible for developing and implementing policies and practices relating to corporate governance, including administration of the Company’s Code of Business Conduct and Ethics, which applies to all of the Company’s officers, directors and employees, and is available on the Company’s website at www.neurocrine.com. The functions of this committee also include consideration of the composition of the Board of Directors and recommendation of individuals for election as directors of the Company. The Nominating/Corporate Governance Committee will consider nominees recommended by stockholders, provided such nominations are made pursuant to the Company’s bylaws and applicable law. The committee met three times during 2016.

The Board created a Science and Medical Technology Committee in 2016, and it is currently comprised of Gary A. Lyons, William H. Rastetter, Ph.D. and Alfred W. Sandroock, Jr. M.D., Ph.D. The purpose of the Science and Medical Technology Committee is to assist the Board of Directors in its oversight of management’s exercise of its responsibility to make significant scientific judgments relating to the Company’s research and development activities and portfolio. The committee met three times during 2016.

Compensation Committee interlocks and insider participation

During 2016, the Compensation Committee consisted of Joseph A. Mollica, W. Thomas Mitchell, George J. Morrow and Richard F. Pops. Mr. Mitchell served on the Compensation Committee until he resigned from the Board of Directors on May 19, 2016. Mr. Morrow joined the Compensation Committee in February 2016. No interlocking relationship existed between any member of the Compensation Committee and any member of any other company’s Board of Directors or compensation committee.

What is our director nomination process?

In selecting non-incumbent candidates and reviewing the qualifications of incumbent candidates for the Board of Directors, the Nominating/Corporate Governance Committee considers the Company’s corporate governance principles, which include the following:

Directors should possess the highest ethics, integrity and values, and be committed to representing the long-term interest of the stockholders. They also must have experience they can draw upon to help direct the business strategies of the Company together with sound judgment. They must be actively engaged in the pursuit of information relevant to the Company’s business and must constructively engage their fellow Board members and management in dialogue and the decision-making process.

Directors must be willing to devote sufficient time to carrying out their duties and responsibilities effectively, and should be committed to serve on the Board of Directors for an extended period of time.

Directors should notify the Chairman of the Board and Chairman of the Nominating/Corporate Governance Committee in the event of any significant change in their employment responsibilities or affiliations. Director nominees should meet the Director Qualification requirements set forth in the Company’s Corporate Governance Guidelines.

In evaluating director nominees, the Nominating/Corporate Governance Committee considers the following factors: personal and professional integrity, ethics and values including any potential conflicts of interest; experience in corporate management and the biopharmaceutical industry, such as serving as an

officer or former officer of a publicly held company; experience as a board member of another publicly held company; and additionally, for nominees seeking re-election, meeting attendance and participation and compliance with Company policies.

It is the Company's policy to have a diversity of skills, professional experience, education, associations, achievements, training, points of view and individual qualities and attributes represented on the Board of Directors. The Nominating/Corporate Governance Committee considers the diversity of the Board of Directors when evaluating candidates for election or re-election to the Board of Directors.

The Nominating/Corporate Governance Committee's goal is to assemble a Board of Directors that brings to the Company a variety of perspectives and skills derived from high quality business and professional experience. In doing so, the Nominating/Corporate Governance Committee also considers candidates with appropriate non-business backgrounds.

In addition to the foregoing, the Nominating/Corporate Governance Committee Charter and Corporate Governance Guidelines set forth minimum criteria for director nominees. The Nominating/Corporate Governance Committee may also consider such other facts as it may deem are in the best interests of the Company and its stockholders. The Nominating/Corporate Governance Committee does, however, believe that at least one, and preferably several members of the Board of Directors, meet the criteria for an "audit committee financial expert" as defined by SEC rules. The following paragraphs provide information as of the date of this proxy statement about the specific experience, qualifications, attributes and skills of each nominee and current member of the Board of Directors that led the Board to conclude that such person should serve as a director. In addition to the information below regarding each Board member, we also believe that all of our directors have a reputation for honesty, integrity and highest ethical standards. They each have demonstrated business acumen, an ability to exercise sound judgment and a commitment to serve the Company.

Class III Directors Nominated for Re-election at the 2017 Annual Meeting

The nomination of *Kevin C. Gorman, Ph.D.* for election to the Company's Board of Directors is based on the fact that as Chief Executive Officer of the Company, Dr. Gorman has extensive knowledge of our product candidates, our employees and the industry in which we operate. Dr. Gorman has also demonstrated exceptional leadership skills, sound business judgment and a strong commitment to the Company.

The nomination of *Gary A. Lyons* for election to the Company's Board of Directors is based on Mr. Lyons' extensive business development and corporate governance experience and, as the Company's former Chief Executive Officer, his in-depth understanding of the Company's product candidates, management and culture. With this history with the Company and management, Mr. Lyons brings a unique perspective and point of view to the Company's Board of Directors.

The nomination of *Alfred W. Sandrock, Jr., M.D., Ph.D.* for election to the Company's Board of Directors is based on his extensive experience and credentials in the biotechnology industry as an Executive Vice President of Biogen and his extensive experience in successfully leading development teams. In addition, Dr. Sandrock's medical expertise in neurology and his scientific background provide a unique contribution to the Board of Directors.

Class I Directors Continuing Until 2018 Annual Meeting

The continued service of *Joseph A. Mollica, Ph.D.* on the Company's Board of Directors is based on his years of experience in the pharmaceutical industry including his wide range of leadership experience, roles and responsibilities with companies such as Pharmacopeia Drug Discovery, Inc., Accelrys, Dupont Company, Dupont Merck Pharmaceutical Company and Ciba-Geigy and his service on a number of life science company Boards. Dr. Mollica contributes a significant history and depth of experience in the biopharmaceutical industry to the Board of Directors.

The continued service of **George J. Morrow** on the Company's Board of Directors is based on his extensive commercialization experience at Amgen, his broad executive experience at GlaxoSmithKline Inc., and his years of experience in corporate governance as a board member of several publicly traded companies. Mr. Morrow's board, leadership experience and commercialization expertise prove valuable strategic insights to the Board of Directors.

The continued service of **William H. Rastetter, Ph.D.** on the Company's Board of Directors is based on Dr. Rastetter's scientific and technical expertise combined with his business experience in leading rapidly growing companies in the life science industry. The Company's continued growth is dependent on scientific and technical advances, and the Board of Directors believes that Dr. Rastetter offers both strategic and technical insight into the risks and opportunities associated with our business. In addition, Dr. Rastetter's board and executive leadership experience at other life science companies provides valuable strategic and governance insight to the Board of Directors as a whole.

Class II Directors Continuing Until 2019 Annual Meeting

The continued service of **Corinne H. Neviny** on the Company's Board of Directors is based on her global expertise as a prior President for Global Operations of Edward Lifesciences, Inc., her financial background as a prior Chief Financial Officer for Edwards Lifesciences and Tularik, Inc., her experience as board and audit committee members at other publicly traded biotechnology companies, and her capital markets experience as Executive Director-Health Care Group at Warburg Dillon Read LLC. Her combination of financial, global and capital markets experience has in the past, and will in the future, help guide the Company's financial and capital strategies.

The continued service of **Richard F. Pops** on the Company's Board of Directors is based on his leadership experience and track record for growing companies, his strength in business strategy and his financial acumen and capital markets experience. In addition, Mr. Pops is recognized for his service to the biopharmaceutical industry as a member of the Boards of the Biotechnology Industry Organization and the Pharmaceutical Research and Manufacturers of America. His breadth and range of industry experience from operations and strategy is a significant contribution to the Board of Directors.

The continued service of **Stephen A. Sherwin, M.D.** on the Company's Board of Directors is based on his experience and credentials in the biotechnology industry as the former Chief Executive Officer of Cell Genesys, Inc., the former chairman and co-founder of Abgenix, Inc., the chairman and co-founder of Ceregene, Inc., and his positions at Genentech, Inc. and the National Cancer Institute. Dr. Sherwin is also currently Chairman Emeritus of the Biotechnology Industry Organization. In addition to his biotechnology credentials, Dr. Sherwin's medical expertise in internal medicine and medical oncology provides a unique contribution to the Board of Directors.

Identification and Evaluation of Nominees for Director

The Nominating/Corporate Governance Committee identifies nominees for director by first evaluating the current members of the Board of Directors willing to continue in service. Current members with qualifications and skills that are consistent with the Nominating/Corporate Governance Committee's criteria for service and who are willing to continue are considered for re-nomination, balancing the value of continuity of service by existing members of the Board of Directors with that of obtaining members who would offer a new perspective. If any member of the Board of Directors does not wish to continue in service, or if the Board of Directors decides not to re-nominate a member for re-election, the Nominating/Corporate Governance Committee identifies the desired skills and experience of a new nominee in light of the criteria above. The Nominating/Corporate Governance Committee generally polls the Board of Directors and members of management for their recommendations and may also seek input from third-party search firms. The Nominating/Corporate Governance Committee may also seek input from industry experts or analysts. The Nominating/Corporate Governance

Committee reviews the qualifications, experience and background of the candidates. Final candidates are then interviewed by the Company's independent directors and executive management. In making its determinations, the Nominating/Corporate Governance Committee evaluates each individual in the context of the Company's Board of Directors as a whole, with the objective of assembling a group that can best perpetuate the success of the Company and represent stockholder interests through the exercise of sound judgment. After review and deliberation of all feedback and data, the Nominating/Corporate Governance Committee makes its recommendation to the Board of Directors.

We have not received director candidate recommendations from the Company's stockholders and do not have a formal policy regarding consideration of such recommendations. However, any recommendations received from stockholders will be evaluated in the same manner that potential nominees suggested by members of our Board of Directors, management or other parties are evaluated. Accordingly, our Board of Directors believes a formal policy regarding consideration of such recommendations is unnecessary.

What is our process for stockholder communications with the Board of Directors?

Stockholders of the Company wishing to communicate with the Company's Board of Directors or an individual director may send a written communication to the Board of Directors or such director c/o Neurocrine Biosciences, Inc., 12780 El Camino Real, San Diego, CA 92130, Attn: Corporate Secretary. Each communication must set forth:

- the name and address of the Company stockholder on whose behalf the communication is sent; and
- the number of Company shares that are beneficially owned by such stockholder as of the date of the communication.

Each stockholder communication will be reviewed by the Company's Corporate Secretary to determine whether it is appropriate for presentation to the Board or such director. Examples of inappropriate communications include advertisements, solicitations or hostile communications.

Communications determined by the Corporate Secretary to be appropriate for presentation to the Board or such director will be submitted to the Board or such director on a periodic basis.

What is the Board's role in risk oversight?

While the Board of Directors has ultimate oversight responsibility for the risk management process, it has delegated portions of this responsibility to various committees. The Board of Directors and its committees oversee risk throughout the business with focus on financial risk, legal/compliance risk and strategic risk. The Audit Committee focuses on financial risk and internal controls and receives an annual financial risk assessment from the Company's independent registered public accounting firm. The Nominating/Corporate Governance Committee and Audit Committee each focus on legal/compliance risk with the Nominating/Corporate Governance Committee taking the lead on the governance and management process and the Audit Committee taking the lead on SEC reporting and compliance. The Compensation Committee addresses compensation policies and practices as they relate to risk management practices and risk-taking incentives. The participation of the full Board of Directors in setting the Company's business strategy incorporates assessment of strategic risk for the Company overall.

How do the Company's compensation policies and practices relate to risk management practices and risk-taking incentives?

During 2016, the Compensation Committee, in conjunction with the Board of Directors, conducted an assessment of how the Company's compensation policies and practices relate to risk management practices and risk-taking incentives. As part of the process, the Compensation Committee engaged the services of an external,

independent compensation consulting firm to conduct an independent risk assessment. Based on this assessment, the Compensation Committee concluded that the Company's compensation policies and practices do not create risks that are reasonably likely to have a material adverse effect on the Company.

What is our policy regarding Board member attendance at the Company's Annual Meeting?

The Company does not have a formal policy regarding attendance by members of the Board of Directors at the Annual Meeting. Directors Dr. Rastetter and Dr. Gorman attended the 2016 Annual Meeting of Stockholders.

REPORT OF THE AUDIT COMMITTEE

The following Report of the Audit Committee does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent the Company specifically incorporates this Report by reference therein.

The Audit Committee is currently comprised of directors Corinne H. Nevinny, Richard F. Pops, and Stephen A. Sherwin, M.D. All current committee members satisfy the definition of "independent director" as established in the Nasdaq Stock Market qualification requirements. The Audit Committee met four times during the year ended December 31, 2016.

The Audit Committee oversees the Company's financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for the Company's financial statements and the reporting process, including the Company's systems of internal controls. In fulfilling its oversight responsibilities, the Audit Committee has reviewed and discussed with management the Company's audited financial statements as of and for the year ended December 31, 2016, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in the financial statements.

The Audit Committee also has reviewed and discussed the Company's audited financial statements as of and for the year ended December 31, 2016 with the Company's independent registered public accounting firm, who are responsible for expressing an opinion on the conformity of those audited financial statements with accounting principles generally accepted in the United States, as well as their judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the Audit Committee under Auditing Standard No. 16, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board (United States) (the "PCAOB"). The independent registered public accounting firm also is responsible for performing an independent audit of the Company's internal control over financial reporting in accordance with the auditing standards of the PCAOB. In addition, the Audit Committee has discussed the independent registered public accounting firm's independence from management and the Company, including the matters in the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB and considered the compatibility of non-audit services with the auditors' independence.

The Audit Committee discussed with the Company's independent registered public accounting firm the overall scope and plans for their audits. The Audit Committee meets with the independent registered public accounting firm, with and without management present, to discuss the results of their examinations, their evaluations of the Company's internal controls, and the overall quality of the Company's financial reporting.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, for filing with the Securities and Exchange Commission. The

Audit Committee and the Board of Directors are also seeking stockholder ratification of the selection of the Company's independent registered public accounting firm for the year ending December 31, 2017.

Respectfully submitted by:
AUDIT COMMITTEE

Corinne H. Nevinny
Richard F. Pops
Stephen A. Sherwin, M.D.

Audit and non-audit fees

The aggregate fees billed to the Company by Ernst & Young LLP, the Company's independent registered public accounting firm, for the indicated services for each of the last two fiscal years were as follows:

	<u>2016</u>	<u>2015</u>
Audit fees (1)	\$479,267	\$575,798
Audit related fees (2)	—	—
Tax fees (3)	39,656	50,000
All other fees (4)	—	—
Total	<u>\$518,923</u>	<u>\$625,798</u>

- (1) Audit fees consist of fees for professional services performed by Ernst & Young LLP for the integrated audit of the Company's annual financial statements and internal control over financial reporting and review of financial statements included in the Company's 10-Q filings, review of registration statements on Form S-3 and Form S-8, and services that are normally provided in connection with statutory and regulatory filings or engagements.
- (2) Audit related fees consist of fees for assurance and related services performed by Ernst & Young LLP that are reasonably related to the performance of the audit or review of the Company's financial statements.
- (3) Tax fees consist of fees for professional services performed by Ernst & Young LLP with respect to tax compliance, tax advice and tax planning. For 2016, these fees were related to tax preparation services. For 2015, these fees included \$40,000 for tax preparation services and \$10,000 for services related to Section 382 studies for net operating loss utilization.
- (4) All other fees consist of fees for other permissible work performed by Ernst & Young LLP that does not meet with the above category descriptions

The Audit Committee has considered whether the provision of non-audit services is compatible with maintaining the independence of Ernst & Young LLP, and has concluded that the provision of such services is compatible with maintaining the independence of that firm. All of the services rendered by Ernst & Young LLP were pre-approved by the Audit Committee in accordance with the Audit Committee pre-approval policy described below.

Audit Committee policy regarding pre-approval of audit and permissible non-audit services of our independent registered public accounting firm

The Company's Audit Committee has established a policy that all audit and permissible non-audit services provided by the Company's independent registered public accounting firm will be pre-approved by the Audit Committee. These services may include audit services, audit related services, tax services and other services. The Audit Committee considers whether the provision of each non-audit service is compatible with maintaining the independence of the Company's registered public accounting firm. Pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The Company's independent registered public accounting firm and management are required to periodically (at least quarterly) report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date.

COMPENSATION COMMITTEE REPORT

The following Report of the Committee does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent the Company specifically incorporates this Report by reference therein.

The Compensation Committee of the Company has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

Respectfully submitted by:
COMPENSATION COMMITTEE

Richard F. Pops
George J. Morrow
Joseph A. Mollica

PROPOSAL ONE: ELECTION OF DIRECTORS

The Company’s bylaws, as amended, provide that the Board of Directors will be comprised of nine directors. The Company’s Certificate of Incorporation provides that the Board of Directors is divided into three classes. There are currently three directors in Class I (Joseph A. Mollica, Ph.D., George J. Morrow and William H. Rastetter, Ph.D.), three directors in Class II (Corinne H. Nevinny, Richard F. Pops and Stephen A. Sherwin, M.D.), and three directors in Class III (Kevin C. Gorman, Ph.D., Gary A. Lyons and Alfred W. Sandrock, M.D., Ph.D.). With the exception of Kevin C. Gorman, Ph.D., who is the Chief Executive Officer of Neurocrine, all current members of the Board of Directors meet the definition of “independent director” under the Nasdaq Stock Market qualification standards.

The directors in Class III hold office until the 2017 Annual Meeting of Stockholders, the directors in Class I hold office until the 2018 Annual Meeting of Stockholders and the directors in Class II hold office until the 2019 Annual Meeting of Stockholders (or, in each case, until their earlier resignation, removal from office, or death). After each such election, the elected directors will then serve in succeeding terms of three years and until a successor is duly elected and qualified. Officers of the Company serve at the discretion of the Board of Directors. There are no family relationships among the Company’s directors and executive officers.

The term of office for directors Kevin C. Gorman, Ph.D., Gary A. Lyons and Alfred W. Sandrock, M.D., Ph.D. will expire at the 2017 Annual Meeting. At the 2017 Annual Meeting, the stockholders will elect three Class III directors for a term of three years.

Nominees for Election at the Annual Meeting

All of the nominees (Kevin C. Gorman, Ph.D., Gary A. Lyons and Alfred W. Sandrock, M.D., Ph.D.) are currently Class III directors of the Company. All of the nominees were previously elected to the Board of Directors by the Company’s stockholders. Information about the nominees is set forth below:

<u>Name of Director</u>	<u>Age</u>	<u>Position in the Company</u>	<u>Director Since</u>
Kevin C. Gorman, Ph.D.	59	Chief Executive Officer and Director	2008
Gary A. Lyons (4)	66	Director	1993
Alfred W. Sandrock, Jr. M.D., Ph.D. (3) (4)	59	Director	2015

Who are the remaining Directors that are not up for election this year?

The Class I and II directors will remain in office after the 2017 Annual Meeting. The names and certain other current information about the directors whose terms of office continue after the Annual Meeting are set forth below:

<u>Name of Director</u>	<u>Age</u>	<u>Position in the Company</u>	<u>Director Since</u>
Joseph A. Mollica, Ph.D. (2) (3)	76	Director	1997
George J. Morrow (2)	65	Director	2015
Corinne H. Nevinny (1)	57	Director	2004
Richard F. Pops (1) (2)	55	Director	1998
William H. Rastetter, Ph.D. (4)	69	Chairman of the Board	2010
Stephen A. Sherwin, M.D. (1) (3)	68	Director	1999

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Nominating/Corporate Governance Committee.
- (4) Member of the Science and Medical Technology Committee.

Vote Required

The nominees receiving the highest number of affirmative votes of the shares present in person or represented by proxy at the 2017 Annual Meeting and entitled to vote on the election of directors will be elected to the Board of Directors.

Votes withheld from any director are counted for purposes of determining the presence or absence of a quorum, but have no other legal effect under Delaware law.

Unless otherwise instructed, the proxy holders will vote the proxies received by them for the Company's Class III nominees named above. If any of the Company's nominees is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who is designated by the present Board of Directors to fill the vacancy. It is not expected that any of the Company's nominees will be unable or will decline to serve as a director. **The Board of Directors unanimously recommends that stockholders vote "FOR" the Class III nominees named above.**

PROPOSAL TWO: ADVISORY VOTE ON COMPENSATION PAID TO THE COMPANY'S NAMED EXECUTIVE OFFICERS

General

At the 2011 Annual Meeting of Stockholders, the Board of Directors, as a matter of good corporate governance, recommended that the stockholders approve an advisory vote on Named Executive Officer compensation ("say-on-pay") on an annual basis. Approximately 91% of the stockholder votes cast at the 2011 Annual Meeting of Stockholders were for the Company's recommendation, and in response the Company holds an annual say-on-pay vote. This annual vote is not intended to address any specific compensation item, but rather the overall compensation of the Company's Named Executive Officers and the philosophy, policies and practices described in this proxy statement.

Summary of the Company's Executive Compensation Philosophy

The Compensation Committee of the Board of Directors (the "Committee") bases its executive compensation decisions on a number of objectives which include aligning management incentives with interests of stockholders, providing competitive compensation, appropriately balancing compensation risk in the context of the Company's business strategy and meeting evolving compensation governance standards. The philosophy of the Committee in establishing the Company's compensation policy for executive officers as well as all other employees is to:

- align compensation plans with both short-term and long-term goals and objectives of the Company and stockholder interests;
- attract and retain highly skilled individuals by offering compensation that compares favorably to other employers who are competing for available employees;
- incentivize employees through a mix of base salary, bonus amounts based on achievement of defined corporate and personal goals and long-term equity awards to generate returns for stockholders; and
- pay for performance by ensuring that an ever increasing percentage of an individual's compensation is performance-based as they progress to higher levels within the Company.

As discussed below in the Compensation Discussion and Analysis, we believe we have adopted a compensation philosophy that provides strong alignment between executive pay and performance based on strategic goals designed to provide both near-term and long-term growth in stockholder value. The historical approval rates, on an advisory basis, for the Company's executive compensation program have been approximately 98%, 99% and 99% for each of the 2014, 2015 and 2016 Annual Meetings of Stockholders, respectively. The Committee and our Board of Directors believe that this level of approval of our executive compensation program is indicative of our stockholders' strong support of our compensation philosophy and goals as well as the overall administration of executive compensation by the Committee and the Board of Directors.

You are being asked to approve on an advisory basis, the compensation paid to the Company's Named Executive Officers as set forth in the Compensation Discussion and Analysis, Summary Compensation Table and related notes and narrative set forth herein. This vote is not intended to address any specific compensation item, but rather the overall compensation of the Company's Named Executive Officers and the philosophy, policies and practices described in this proxy statement.

Vote Required

The 'say-on-pay' vote is advisory and therefore not binding on the Company, the Committee or the Board of Directors. However, we value the opinions of our stockholders and will review and will continue to consider the

outcome of this advisory vote when making future compensation decisions for our Named Executive Officers and will evaluate whether any actions are necessary to address the stockholders' concerns. Approval of this advisory vote requires the affirmative vote of the majority of shares represented in person or by proxy and entitled to vote on the item. **The Board of Directors unanimously recommends voting "FOR" approval of the Company's Named Executive Officers compensation.**

PROPOSAL THREE: ADVISORY VOTE ON THE FREQUENCY OF VOTING ON THE COMPENSATION PAID TO THE COMPANY'S NAMED EXECUTIVE OFFICERS

General

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and Section 14A of the Exchange Act, every six calendar years, stockholders vote on whether say-on-pay votes should occur every year, every two years or every three years. At the 2011 Annual Meeting of Stockholders, the Board of Directors, as a matter of good corporate governance, recommended that the stockholders approve an advisory vote on the frequency of future say-on-pay votes on an annual basis. Approximately 91% of the stockholder votes cast at the 2011 Annual Meeting of Stockholders were for the Company's recommendation, and in response the Company has since held an annual say-on-pay vote. At the 2017 Annual Meeting of Stockholders, stockholders will vote on whether say-on-pay votes should occur every year, every two years or every three years. Stockholders will be allowed to specify one of four choices for this proposal on the proxy card: one-year, two-years, three-years or abstain. Stockholders are not voting to approve or disapprove the recommendation of the Board of Directors.

Recommendation of the Board of Directors

After considering the benefits and consequences of each alternative, we recommend that our stockholders select a frequency of one year (*i.e.*, an annual vote). An annual vote provides a consistent and clear communication channel for stockholders to voice their opinion on the Company's executive pay program.

Vote Required

The advisory vote on the frequency of future advisory votes on executive compensation is nonbinding on the Company or the Board of Directors. The frequency receiving the highest number of affirmative votes of the shares represented in person or by proxy and entitled to vote on the item will be considered the frequency preferred by the stockholders. Although nonbinding, the Board of Directors will consider the voting results when making future decisions regarding frequency of advisory votes on executive compensation. **The Board of Directors unanimously recommends voting for conducting future advisory votes on named executive officer compensation on a "ONE YEAR" basis.**

PROPOSAL FOUR: APPROVAL OF AN AMENDMENT TO THE 2011 EQUITY INCENTIVE PLAN

General

The Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan was originally approved by the Board of Directors and the stockholders of the Company in 2011, and was subsequently amended by the Board of Directors and our stockholders most recently in 2016 (the “2011 Plan”). Subject to stockholder approval, our Board of Directors approved an amendment of the 2011 Plan on February 6, 2017 (the 2011 Plan, as amended, the “Amended 2011 Plan”). The Board of Directors is requesting stockholder approval of the Amended 2011 Plan, which includes the following material changes to the 2011 Plan, as described in more detail under “Summary of the Amended 2011 Plan” below:

- to increase in the number of shares of common stock authorized for issuance under the 2011 Plan from 15,500,000 to 17,000,000 shares; and
- to increase in the maximum number of shares of common stock that may be issued under the 2011 Plan pursuant to the exercise of incentive stock options from 15,500,000 to 17,000,000 shares.

The Board of Directors believes that the proposed increase in the number of shares of common stock reserved for issuance under the Amended 2011 Plan will allow the Company to attract and retain valuable employees and continue to provide its employees, consultants and directors with a proprietary interest in the Company. In particular, the Company anticipates doubling its number of employees in 2017 as a result of receiving Food and Drug Administration (FDA) approval of the Company’s first product, INGREZZA™ (valbenazine) capsules, which occurred in April 2017. The Company is commercializing INGREZZA in the United States. Within the Company, equity awards foster an ownership culture and are a critical tool for driving stockholder value and for recruiting, retaining and motivating employees. The Company grants annual equity awards to employees as an incentive to retain its work force and remain competitive. The terms of the Company’s annual equity awards and the Company’s employee policies are designed to align employee and stockholder interests. The Company grants equity awards to a broad group of employees and such awards constitute a significant component of the Company’s employees’ total compensation. The Company’s equity awards contain long-term vesting, performance-based vesting, and provisions designed to encourage employees to focus on the Company’s long-term goals and success. If our stockholders do not approve the Amended 2011 Plan, the Company strongly believes that it will be unable to successfully use equity as part of its compensation program, as most of its competitors in the industry do, putting the Company at a significant disadvantage and compromising its ability to enhance stockholder value.

The Amended 2011 Plan authorizes the grant to our employees of options that qualify as incentive stock options under Section 422 of the Code. The 2011 Plan also authorizes the grant of nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance stock awards and other stock awards (collectively “stock awards”) to our employees, directors and consultants. The 2011 Plan also provides that certain nonstatutory stock options will be automatically granted to non-employee directors and the Chairman of the Board of Directors of the Company, as described below.

As of March 31, 2017, under the 2011 Plan there were options outstanding to purchase 6,410,435 shares of common stock, and 5,303,754 shares were available for future stock awards; 1,331,754 shares were subject to outstanding restricted stock units; and 1,178,882 shares previously issued upon exercise of options granted and 1,275,175 shares previously issued upon vesting of restricted stock units under the 2011 Plan are now outstanding shares of common stock. As of April 12, 2017, there were approximately 355 employees and directors eligible to receive grants under the 2011 Plan.

As of the Record Date, whether granted under the 2011 Plan or otherwise, an aggregate of 7,171,428 shares are issuable upon exercise of outstanding options with a weighted average exercise price of \$24.94 and a weighted average remaining contractual term of 7.2 years; and 1,356,754 shares are subject to unvested restricted stock units. The closing price of the Company’s common stock on March 31, 2017 was \$43.30, with 87,519,910 shares outstanding.

Vote Required

At the Annual Meeting, the stockholders are being asked to approve the Amended 2011 Plan. The affirmative vote of the holders of a majority of the shares represented in person or by proxy at the Annual Meeting will be required to approve the Amended 2011 Plan. **The Board of Directors recommends voting “FOR” the approval of the Amended 2011 Plan.**

Summary of the Amended 2011 Plan

The essential features of the Amended 2011 Plan are summarized below. This summary does not purport to be complete and is subject to, and qualified by reference to, all provisions of the Amended 2011 Plan. The Amended 2011 Plan, which reflects all of the changes proposed to be made to the 2011 Plan, is attached as Appendix A to this proxy statement and is incorporated herein by reference.

Purpose. The purpose of the Amended 2011 Plan is to enable the Company to attract and retain the best available personnel, to provide additional incentives to the employees, directors and consultants of the Company and to promote the success of the Company’s business.

Administration. Our Board of Directors has the authority to administer the Amended 2011 Plan. Our Board of Directors also has the authority to delegate some or all of the administration of the Amended 2011 Plan (except the Non-Discretionary Grant Program summarized below) to a committee or committees composed of one or more members of the Board of Directors or Company officers (the Board of Directors or any such committee, the “Administrator”). The Amended 2011 Plan may be administered by different committees with respect to different groups of employees and consultants. The Administrator may make any determinations deemed necessary or advisable for the Amended 2011 Plan. The Administrator, in its discretion, selects the employees, directors and consultants to whom stock awards may be granted, the time or times at which such awards shall be granted, the number of shares subject to each such grant, and other terms of the stock awards. All decisions, determinations and interpretations of the Administrator shall be final and binding on all holders.

Eligibility. Incentive stock options may be granted only to our employees. Nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance stock awards and other stock awards may be granted under the Amended 2011 Plan to our employees, directors and consultants. Participation in the non-discretionary grant program is limited to our non-employee directors (see “Non-Discretionary Grant Program” below).

Stock Subject to the Amended 2011 Plan

Subject to stockholder approval of this Proposal Four and adjustments for changes in our capitalization, an aggregate of 17,000,000 shares of common stock will be reserved for issuance under the Amended 2011 Plan. Shares may be issued in connection with a merger or acquisition as permitted by the rules of the applicable national securities exchange, and such issuance shall not reduce the number of shares available for issuance under the Amended 2011 Plan. If a stock award granted under the Amended 2011 Plan expires or otherwise terminates without all of the shares having been issued, or if any shares of common stock issued pursuant to a stock award are forfeited to us because of the failure to meet a contingency or condition required for the vesting of such shares, then the shares of common stock not issued under such stock award, or forfeited to us, shall revert to and again become available for issuance under the Amended 2011 Plan.

If any shares subject to a stock award are not delivered to a participant because such shares are withheld for the payment of taxes or the stock award is exercised through a reduction of shares subject to the stock award (i.e. “net exercised”), or an appreciation distribution in respect of a stock appreciation right is paid in shares of common stock, the number of shares that are not delivered will not again become available for issuance under the Amended 2011 Plan. If the exercise price of any stock award is satisfied by tendering shares of common stock held by the participant, then the number of shares so tendered will not become available for issuance under the Amended 2011 Plan.

The aggregate maximum number of shares of common stock that may be issued under the Amended 2011 Plan pursuant to the exercise of incentive stock options, subject to stockholder approval of this Proposal Four, is 17,000,000 shares.

Per-Person Award Limitations. Section 162(m) of the Code places limits on the deductibility for federal income tax purposes of compensation paid to certain executive officers of the Company. In order to preserve the Company's ability to deduct the compensation income associated with stock awards granted to such persons, the Amended 2011 Plan provides that no employee may be granted, in any fiscal year of the Company, stock options, stock appreciation rights (and any other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least the fair market value on the date of grant) (all such options, stock appreciation rights and other stock awards "appreciation awards") covering more than 500,000 shares of common stock. Notwithstanding this limit, however, in connection with an employee's initial employment, he or she may be granted appreciation awards covering up to an additional 500,000 shares of common stock. Additional per-person limitations apply to performance stock awards, as described below in the section entitled "Terms of Performance Awards".

Full Value Stock Award Limitations. In addition, subject to adjustments upon changes in our capitalization or in connection with a merger or other similar event, the maximum number of shares of common stock that may be issued pursuant to the grant of "full value stock awards" (i.e., restricted stock, restricted stock units, performance stock and other stock awards, but not including stock options or stock appreciation rights) is 50% of the total number of shares of common stock issuable under the Amended 2011 Plan.

Minimum Vesting. Generally, no full value stock award that vests on the basis of the participant's continuous service with the Company shall vest at a rate that is any more rapid than ratably over a three-year period, and no full value stock award that vests based on the satisfaction of performance goals shall have a performance period of less than twelve months.

Limited Exception to Minimum Vesting Restrictions. Up to five percent (5%) of the total number of shares of common stock available for issuance under the Amended 2011 Plan may in the aggregate be issued as full value stock awards that are not subject to the minimum vesting requirements set forth in the Amended 2011 Plan.

Limit on Non-Employee Director Compensation. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a non-employee director with respect to any period commencing on the date of the Company's annual meeting of stockholders for a particular year and ending on the date of the Company's annual meeting of stockholders for the next subsequent year, including stock awards granted under the Amended 2011 Plan and cash fees paid to such non-employee director, will not exceed \$1,250,000 in total value. In addition, the aggregate value of the initial option grant or other similar stock award(s) granted under the Plan or otherwise to any individual for service as a non-employee director upon or in connection with his or her initial election or appointment to the Board of Directors will not exceed \$2,000,000 in total value. For purposes of these limitations, the value of stock awards is calculated based on the grant date fair value of such stock awards for financial reporting purposes. The Board of Directors has the authority to make exceptions to these limits in extraordinary circumstances, in its discretion, provided that any non-employee director who is granted or paid such additional compensation may not participate in the decision to grant or pay such additional compensation.

Terms and Conditions of Options and Stock Appreciation Rights

Options and stock appreciation rights may be granted under the Amended 2011 Plan pursuant to stock option agreements and stock appreciation right agreements. The following is a description of the permissible terms of options and stock appreciation rights under the Amended 2011 Plan. Individual grants may be more restrictive as to any or all of the permissible terms described below.

Exercise Price. The Administrator determines the exercise price of options and strike price of stock appreciation rights at the time the options or stock appreciation rights are granted as set forth in the applicable stock award agreement. The exercise price of a stock option and strike price of a stock appreciation right may not be less than 100% of the fair market value of the common stock on the date such award is granted. In the case of an incentive stock option granted to an optionee who owns more than 10% of all classes of stock of the Company or any parent or subsidiary of the Company, the exercise price may not be less than 110% of the fair market value of the common stock on the date such option is granted. The fair market value of the common stock is generally determined with reference to the closing sale price for the common stock on the date the option or stock appreciation right is granted.

Stock Appreciation Rights. Each stock appreciation right is denominated in shares of common stock equivalents. Upon exercise of a stock appreciation right, we will pay the participant an amount equal to the excess of (i) the aggregate fair market value of our common stock on the date of exercise over (ii) the strike price determined by the Administrator on the date of grant. The appreciation distribution upon exercise of a stock appreciation right will be paid in shares of our common stock, in cash, any combination of the two or any other form of consideration determined by the Administrator.

Repricing; Cancellation and Re-Grant of Stock Awards. Under the Amended 2011 Plan, the Administrator does not have the authority to reprice any outstanding stock awards by reducing the exercise price of the stock award or to cancel any outstanding stock awards in exchange for cash or other stock awards without obtaining the approval of our stockholders within 12 months prior to the repricing or cancellation and re-grant event.

Exercise; Form of Consideration. The Administrator determines when options and stock appreciation rights become exercisable as set forth in the applicable stock award agreement. The means of payment for shares issued upon exercise of an option is specified in each option agreement. The Amended 2011 Plan permits payment to be made to the extent permitted under applicable laws by cash, check, other shares of common stock of the Company (with some restrictions), net exercise, cashless exercise, any other form of consideration permitted by applicable law, or any combination thereof.

Term. The Administrator determines the term of options and stock appreciation rights granted under the Amended 2011 Plan as set forth in the applicable stock award agreement. The term of options and stock appreciation rights granted under the Amended 2011 Plan may be no more than 10 years from the date of grant. In the case of an incentive stock option granted to an optionee who owns more than 10% of all classes of stock of the Company or any parent or subsidiary of the Company, the term of the option may be no more than five years from the date of grant. No option or stock appreciation right may be exercised after the expiration of its term.

Termination of Continuous Service. Options and stock appreciation rights granted under the Amended 2011 Plan generally terminate three months after termination of the participant's service unless (i) such termination is due to the participant's disability, in which case the stock award may, but need not, provide that it may be exercised (to the extent the stock award was exercisable at the time of the termination of service) at any time within 12 months of such termination; (ii) the participant dies before the participant's service has terminated, or within the period specified in the stock award agreement after termination of such service, in which case the stock award may, but need not, provide that it may be exercised (to the extent the stock award was exercisable at the time of the participant's death) within 18 months of the participant's death by the person or persons to whom the rights to exercise such stock award pass by will or by the laws of descent and distribution; (iii) the stock award by its terms specifically provides otherwise, or (iv) the termination is for cause. Except as provided otherwise in a participant's stock award agreement, or otherwise set forth in an employment agreement, upon termination of a participant's service for cause, the stock award shall immediately terminate and may not thereafter be exercised. A participant may designate a beneficiary who may exercise the stock award following the participant's death. Individual grants by their terms may provide for exercise within a longer or shorter period of time following termination of service. In no event, however, may an option or stock appreciation right be exercised beyond the expiration of its maximum term. The option or stock appreciation right term generally is

extended in the event that exercise of the stock award within the foregoing periods is prohibited. A participant's stock award agreement may provide that if the exercise of the stock award following the termination of the participant's service would be prohibited because the issuance of stock would violate the registration requirements under the Securities Act of 1933, as amended, then the stock award will terminate on the earlier of (i) the expiration of the term of the stock award or (ii) three months after the termination of the participant's service during which the exercise of the stock award would not be in violation of such registration requirements.

Other Provisions. The stock option agreement may contain other terms, provisions and conditions not inconsistent with the Amended 2011 Plan as may be determined by the Administrator.

Terms of Restricted Stock Awards and Restricted Stock Unit Awards

Restricted stock awards and restricted stock unit awards may be granted under the Amended 2011 Plan pursuant to restricted stock award and restricted stock unit award agreements. The following is a description of the permissible terms of restricted stock awards and restricted stock unit awards under the Amended 2011 Plan. Individual grants may be more restrictive as to any or all of the permissible terms described below.

Consideration. The Administrator may grant restricted stock awards and restricted stock unit awards in consideration for past services rendered to the Company or in exchange for any other form of legal consideration acceptable to the Administrator.

Vesting. Shares of stock issued under a restricted stock award agreement may, but need not, be subject to forfeiture to the Company in accordance with a vesting schedule as determined by the Administrator. Restricted stock unit awards vest and are issued at the rate specified in the restricted stock unit award agreement as determined by the Administrator. However, at the time of grant, the Administrator may impose additional restrictions or conditions that delay the delivery of stock to be issued in respect of the restricted stock unit award after vesting.

Termination of Service. Unless the Administrator determines otherwise, the restricted stock purchase agreement shall give the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's employment or consulting relationship with the Company for any reason (including death and disability). The purchase price for any issued shares repurchased by the Company shall be the original price paid by the purchaser, if any. The repurchase option lapses at a rate determined by the Administrator. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be automatically forfeited upon the participant's termination of service.

Dividend Equivalents. Dividend equivalent rights may be credited with respect to shares covered by a restricted stock unit award. However, we do not anticipate paying cash dividends on our common stock for the foreseeable future.

Terms of Performance Awards

The Amended 2011 Plan allows the Administrator to issue performance stock awards. Performance stock awards may be granted, vest or be exercised based upon the attainment during a certain period of time of certain performance goals and will be issued in shares of our common stock, or if determined by the Administrator, cash. All of our employees, consultants and directors are eligible to receive performance stock awards under the Amended 2011 Plan. The length of any performance period, the performance goals to be achieved during the performance period and the measure of whether and to what degree such performance goals have been attained shall be determined by the Administrator in accordance with the requirements of Section 162(m) of the Code. The maximum amount to be granted to any individual in any calendar year attributable to such performance stock awards may not exceed 500,000 shares of our common stock. Notwithstanding this limit, however, in connection with an employee's initial employment, he or she may be granted stock awards covering up to an additional 500,000 shares of common stock.

In granting a performance stock award, the Administrator will set a period of time, or a performance period, over which the attainment of one or more goals, or performance goals, will be measured for the purpose of determining whether the stock award recipient has a vested right in or to such performance stock award. With respect to stock awards that are intended to qualify as performance based compensation for purposes of Section 162(m) of the Code, within the time period prescribed by Section 162(m) of the Code (typically before the 90th day of a performance period), the Administrator will establish the performance goals, based upon one or more pre-established criteria, or performance criteria, enumerated in the Amended 2011 Plan and described below. As soon as administratively practicable following the end of the performance period, the Administrator will certify (in writing) whether the performance goals have been satisfied.

Performance goals under the Amended 2011 Plan shall be established by the Administrator, based on one or more of the following performance criteria: (i) earnings (including earnings per share and net earnings, in either case before or after any or all of: interest, taxes, depreciation and amortization, legal settlements or other income (expense), or stock-based compensation, other non-cash expenses and changes in deferred revenue); (ii) total stockholder return; (iii) return on equity or average stockholder's equity; (iv) return on assets, investment, or capital employed; (v) stock price; (vi) margin (including gross margin); (vii) income (before or after taxes); (viii) operating income; (ix) operating income after taxes; (x) pre-tax profit; (xi) operating cash flow; (xii) sales or revenue targets; (xiii) increases in revenue or product revenue; (xiv) expenses and cost reduction goals; (xv) improvement in or attainment of working capital levels; (xvi) economic value added (or an equivalent metric); (xvii) market share; (xviii) cash flow; (xix) cash flow per share; (xx) cash burn; (xxi) share price performance; (xxii) debt reduction; (xxiii) implementation or completion of projects or processes (including, without limitation, discovery of a pre-clinical drug candidate, recommendation of a drug candidate to enter a clinical trial, clinical trial initiation, clinical trial enrollment and dates, clinical trial results, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, presentation of studies and launch of commercial plans, compliance programs or education campaigns); (xxiv) customer satisfaction; (xxv) stockholders' equity; (xxvi) capital expenditures; (xxvii) debt levels; (xxviii) financings; (xxix) operating profit or net operating profit; (xxx) workforce diversity; (xxxi) growth of net income or operating income; (xxxii) billings; (xxxiii) employee hiring; (xxxiv) funds from operations; (xxxv) budget management; (xxxvi) strategic partnerships or transactions (including acquisitions, joint ventures or licensing transactions); (xxxvii) engagement of thought leaders and patient advocacy groups; (xxxviii) enhancement of intellectual property portfolio, filing of patent applications and granting of patents; (xxxix) litigation preparation and management; and (xl) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Administrator.

Unless otherwise determined by the Administrator, the attainment of performance goals for a performance period will be calculated: (i) to exclude restructuring and/or other nonrecurring charges; (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (vi) to exclude the dilutive effects of acquisitions or joint ventures; (vii) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (viii) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (ix) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (xi) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (xii) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the FDA or any other regulatory body. In addition, the

Administrator retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of performance goals.

Non-Discretionary Grant Program

The non-discretionary grant program under the Amended 2011 Plan provides for the grant of stock options to non-employee directors over their period of service on the Board of Directors. These stock options will be granted as follows:

Initial Option Grant. Each new non-employee director will, at the time of his or her initial election or appointment to the Board of Directors, receive an option to purchase a number of shares of the Company's common stock determined by the Board of Directors (the "initial option grant"). The initial option grant shall vest monthly with respect to 1/36th of the shares over the three-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates, so that the initial option grant will be fully vested on the third anniversary of the date of grant.

Annual Option Grant. On each annual meeting, each continuing non-employee director will automatically be granted a stock option to purchase a number of shares of our common stock determined by the Board of Directors (the "annual option grant"). The annual option grant shall vest monthly with respect to 1/12th of the shares over the one year period following the date of grant, subject to the director's continuous service through the applicable vesting dates, so that the annual option grant will be fully vested on the first anniversary of the date of grant.

General Terms. The exercise price of each option granted under the non-discretionary grant program is 100% of the fair market value of the common stock subject to the option on the date of grant. The maximum term of options granted under the non-discretionary grant program is ten years. All other terms of each option granted under the non-discretionary grant program shall be consistent with the terms of the Amended 2011 Plan.

Corporate Transaction. Each option granted under the non-discretionary grant program shall automatically fully accelerate vesting upon a corporate transaction, subject to the non-employee director's continuous service through the date of the corporate transaction.

Terms of Other Stock Awards

The Administrator may grant other stock awards that are valued in whole or in part by reference to our common stock. Subject to the provisions of the Amended 2011 Plan, the Administrator has the authority to determine the persons to whom, and the dates on which, such other stock awards will be granted, the number of shares of common stock (or cash equivalents) to be subject to each award, and other terms and conditions of such awards.

General Provisions

Tax Withholding. To the extent provided by the terms of any stock award agreement, a participant may satisfy any federal, state or local tax withholding obligation relating to such stock award by a cash payment, by authorizing the Company to withhold a portion of the stock otherwise issuable to the participant, by withholding from any amounts otherwise payable to the participant, by a combination of these means, or by such other method as set forth in the stock award agreement.

Transferability. Stock awards may not be sold, pledged, transferred, or disposed of in any manner other than by will or by the laws of descent and distribution, pursuant to a domestic relations order, or with respect to stock awards other than options or stock appreciation rights, with the Administrator's consent, and may be exercised, during the lifetime of the holder, only by the holder or such transferees as have been transferred a

stock award with the Administrator's consent. If the Administrator makes a stock award transferable, such stock award shall contain such additional terms and conditions as the Administrator deems appropriate and such award will not otherwise be transferred for consideration.

Adjustments Upon Changes in Capitalization. In the event any change is made to the outstanding shares of the Company's common stock without the receipt of consideration (whether through a stock split or other specified change in our capital structure), the Administrator shall appropriately adjust the number and kind of shares of stock (or other securities or property) subject to the Amended 2011 Plan, the maximum number of shares that may be issued pursuant to the exercise of incentive stock options, the maximum numbers and/or class of securities for which any one person may be granted appreciation awards, full value stock awards and performance stock awards per calendar year, the number and kind of shares of stock (or other securities or property) subject to any stock award outstanding under the Amended 2011 Plan, and the exercise or purchase price of any such outstanding stock award.

Effect of Certain Corporate Events. In the event of a dissolution or liquidation of the Company, all outstanding stock awards under the Amended 2011 Plan shall terminate immediately prior to such dissolution or liquidation. The Amended 2011 Plan further provides that, in the event of a sale, or other disposition of all or substantially all of the Company's assets or specified types of mergers or consolidations (each, a "corporate transaction"), any surviving or acquiring corporation shall either assume stock awards outstanding under the Amended 2011 Plan or substitute similar stock awards for those outstanding under the Amended 2011 Plan. If any surviving corporation declines to assume stock awards outstanding under the Amended 2011 Plan or to substitute similar stock awards, then, with respect to participants whose service with the Company has not terminated prior to the time of such corporate transaction, the vesting and the time during which such stock awards may be exercised will be accelerated in full, and all outstanding stock awards will terminate if the participant does not exercise such stock awards at or prior to the corporate transaction. With respect to any stock awards that are held by other participants that terminated service with the Company prior to the corporate transaction, the vesting and exercisability provisions of such stock awards will not be accelerated and such stock awards will terminate if not exercised prior to the corporate transaction.

Amendment and Termination of the Amended 2011 Plan. The Board of Directors may amend, alter, suspend or terminate the Amended 2011 Plan, or any part thereof, at any time and for any reason. Unless sooner terminated, the Amended 2011 Plan will terminate on February 20, 2021. However, the Amended 2011 Plan requires stockholder approval for any amendment to the Amended 2011 Plan to the extent necessary to comply with applicable laws, rules and regulations. No action by the Board of Directors or stockholders may impair any award previously granted under the Amended 2011 Plan without the consent of the holder.

Federal Income Tax Consequences

Incentive Stock Options. An optionee who is granted an incentive stock option does not recognize taxable income at the time the option is granted or upon its exercise, although the exercise is an adjustment item for alternative minimum tax purposes and may subject the optionee to the alternative minimum tax. Upon a disposition of the shares more than two years after grant of the option and one year after exercise of the option, any gain or loss is treated as long-term capital gain or loss. If these holding periods are not satisfied, the optionee recognizes ordinary income at the time of disposition equal to the difference between the exercise price and the lesser of (i) the excess of the stock's fair market value on the date of exercise over the exercise price, or (ii) the participant's actual gain, if any, on the purchase and sale. Any gain or loss recognized on such a premature disposition of the shares in excess of the amount treated as ordinary income is treated as long-term or short-term capital gain or loss, depending on the holding period. A different rule for measuring ordinary income upon such a premature disposition may apply if the optionee is also an officer, director or 10% stockholder of the Company. Unless limited by Section 162(m) of the Code, the Company is entitled to a deduction in the same amount as the ordinary income recognized by the optionee.

Nonstatutory Stock Options. An optionee does not recognize any taxable income at the time he or she is granted a nonstatutory stock option. Upon exercise, the optionee recognizes taxable income generally measured by the excess of the then fair market value of the shares over the exercise price. Any taxable income recognized in connection with an option exercise by an employee of the Company is subject to tax withholding by the Company. Unless limited by Section 162(m) of the Code, the Company is entitled to a deduction in the same amount as the ordinary income recognized by the optionee. Upon a disposition of such shares by the optionee, any difference between the sale price and the optionee's exercise price, to the extent not recognized as taxable income as provided above, is treated as long-term or short-term capital gain or loss, depending on the holding period.

Stock Appreciation Rights. No taxable income is realized upon the receipt of a stock appreciation right. Upon exercise of the stock appreciation right, the fair market value of the shares (or cash in lieu of shares) received is recognized as ordinary income to the participant in the year of such exercise. Generally, with respect to employees, we are required to withhold from the payment made on exercise of the stock appreciation right or from regular wages or supplemental wage payments an amount based on the ordinary income recognized. Subject to the requirement of reasonableness, Section 162(m) of the Code and the satisfaction of a reporting obligation, we will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the participant.

Restricted Stock Awards. For federal income tax purposes, if an individual is granted a restricted stock award, the recipient generally will recognize taxable ordinary income equal to the excess of the common stock's fair market value over the purchase price, if any. However, to the extent the common stock is subject to certain types of restrictions, such as a repurchase right in favor of the Company, the taxable event will be delayed until the vesting restrictions lapse unless the recipient makes a valid election under Section 83(b) of the Code. If the recipient makes a valid election under Section 83(b) of the Code with respect to restricted stock, the recipient generally will recognize ordinary income at the date of acquisition of the restricted stock in an amount equal to the difference, if any, between the fair market value of the shares at that date over the purchase price for the restricted stock. If, however, a valid Section 83(b) election is not made by the recipient, the recipient will generally recognize ordinary income when the restrictions on the shares of restricted stock lapse, in an amount equal to the difference between the fair market value of the shares at the date such restrictions lapse over the purchase price for the restricted stock. With respect to employees, the Company is generally required to withhold from regular wages or supplemental wage payments an amount based on the ordinary income recognized. Generally, the Company will be entitled (subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation) to a business expense deduction equal to the taxable ordinary income realized by the recipient. Upon disposition of the common stock, the recipient will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such common stock, if any, plus any amount recognized as ordinary income upon acquisition (or the lapse of restrictions) of the common stock. Such gain or loss will be long-term or short-term depending on how long the common stock was held. Slightly different rules may apply to recipients who are subject to Section 16(b) of the Exchange Act.

Restricted Stock Unit Awards. No taxable income is recognized upon receipt of a restricted stock unit award. The participant will recognize ordinary income in the year in which the shares subject to that unit are actually issued to the participant in an amount equal to the fair market value of the shares on the date of issuance. The participant and the Company will be required to satisfy certain tax withholding requirements applicable to such income. Subject to the requirement of reasonableness, Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the participant at the time the shares are issued. In general, the deduction will be allowed for the taxable year in which such ordinary income is recognized by the participant.

Potential Limitation on Company Deductions. Section 162(m) of the Code denies a deduction to any publicly held corporation for compensation paid to certain "covered employees" in a taxable year to the extent that compensation exceeds \$1 million for a covered employee. It is possible that compensation attributable to

awards granted in the future under the Amended 2011 Plan, when combined with all other types of compensation received by a covered employee from the Company, may cause this limitation to be exceeded in any particular year. Certain kinds of compensation, including qualified “performance-based compensation,” are disregarded for purposes of the deduction limitation. In accordance with Treasury regulations issued under Section 162(m) of the Code, compensation attributable to stock options will qualify as performance-based compensation, provided that: (1) the stock award plan contains a per-employee limitation on the number of shares for which awards may be granted during a specified period; (2) the per-employee limitation is approved by the stockholders; (3) the stock award is granted by a compensation committee comprised solely of “outside directors”; and (4) the exercise price of the stock award is no less than the fair market value of the stock on the date of grant.

Restricted stock awards, restricted stock unit awards and other stock awards may qualify as performance-based compensation under the Treasury regulations only if: (1) the stock award is granted by a compensation committee comprised solely of “outside directors”; (2) the stock award is earned (typically through vesting) only upon the achievement of an objective performance goal established in writing by the compensation committee while the outcome is substantially uncertain; (3) the compensation committee certifies in writing prior to the earning of the stock award that the performance goal has been satisfied; and (4) prior to the earning of the stock award, stockholders have approved the material terms of the stock award (including the class of employees eligible for such stock award, the business criteria on which the performance goal is based, and the maximum amount (or formula used to calculate the amount) payable upon attainment of the performance goal). The Amended 2011 Plan has been designed to permit the compensation committee to grant stock options, restricted stock awards, restricted stock units and other stock awards and performance cash awards which will qualify as “performance-based compensation.”

The foregoing is only a summary of the effect of federal income taxation upon holders of stock awards and the Company with respect to the grant and exercise of stock awards under the Amended 2011 Plan. It does not purport to be complete, and does not discuss the tax consequences of the holder’s death or the provisions of the income tax laws of any municipality, state or foreign country in which the holder may reside.

New Plan Benefits

Amended 2011 Plan

<u>Name</u>	<u>Dollar value</u>	<u>Number of shares</u>
Kevin C. Gorman, Ph.D. (1) President, Chief Executive Officer and Director	(3)	(3)
Timothy P. Coughlin (2) Chief Financial Officer	(3)	(3)
Christopher F. O’Brien, M.D. Chief Medical Officer	(3)	(3)
Eric Benevich Chief Commercial Officer	(3)	(3)
Haig P. Bozigian, Ph.D. Chief Development Officer	(3)	(3)
All current executive officers as a group (nine persons)	(3)	(3)
All current non-employee directors as a group (eight persons)	(4)	(4)
All employees, including all current officers who are not executive officers, as a group (approximately 345 persons)	(3)	(3)

- (1) Dr. Gorman stopped serving as our President effective January 9, 2017, when David-Alexandrè C. Gros, M.D. began serving as our President and Chief Operating Officer.

- (2) Mr. Coughlin resigned as our Chief Financial Officer effective February 15, 2017 (the “Resignation Date”), but he will remain an employee of the Company following the Resignation Date until December 31, 2017, or such earlier date that Mr. Coughlin’s employment with the Company terminates, in order to provide transition services to his successor and other Company employees.
- (3) Awards granted under the Amended 2011 Plan to our executive officers and other employees are discretionary and are not subject to set benefits or amounts under the terms of the Amended 2011 Plan, and our Board of Directors and our Compensation Committee have not granted any awards under the Amended 2011 Plan subject to stockholder approval of this Proposal Four. Accordingly, the benefits or amounts that will be received by or allocated to our executive officers and other employees under the Amended 2011 Plan are not determinable.
- (4) Pursuant to the terms of the Amended 2011 Plan, non-employee directors are entitled to receive options as described in “Non-Discretionary Grant Program” above. Under our current compensation arrangements for non-employee directors and the Amended 2011 Plan, each of our eight current non-employee directors will be automatically granted a nonstatutory stock option to purchase 15,000 (18,000 in the case of our Chairman) shares at the Annual Meeting and such options will be granted under the Amended 2011 Plan. For additional information regarding our current compensation arrangements for non-employee directors, please see “Director Compensation” below. The actual value realized upon exercise of an option will depend on the excess, if any, of the stock price over the exercise prices on the date of exercise. Only non-employee directors of the Company are eligible to receive non-discretionary grants under the Amended 2011 Plan. All other grants under the Amended 2011 Plan are within the discretion of the Administrator.

Plan Benefits

The following table sets forth, for each of the individuals and groups indicated, the total number of shares of our common stock subject to options and stock awards that have been granted (even if not currently outstanding) under the 2011 Plan through the Record Date.

2011 Plan

<u>Name and position</u>	<u>Number of shares Granted</u>
Kevin C. Gorman, Ph.D. (1) President, Chief Executive Officer and Director	1,583,250
Timothy P. Coughlin (2) Chief Financial Officer	691,200
Christopher F. O’Brien, M.D. Chief Medical Officer	798,300
Haig Bozigian Chief Development Officer	718,600
Eric Benevich Chief Commercial Officer	157,800
All current executive officers as a group (nine persons)	4,945,350
All current directors who are not executive officers as a group (eight persons)	643,000
Each nominee for election as a director: (three persons)	
Kevin C. Gorman, Ph.D.	1,583,250
Gary A. Lyons	85,000
Alfred W. Sandroock, M.D., Ph.D	55,000
All employees, including all current officers who are not executive officers, as a group (approximately 345 persons)	4,727,094

- (1) Dr. Gorman stopped serving as our President effective January 9, 2017, when David-Alexandrè C. Gros, M.D. began serving as our President and Chief Operating Officer.

- (2) Mr. Coughlin resigned as our Chief Financial Officer effective February 15, 2017 (the “Resignation Date”), but he will remain an employee of the Company following the Resignation Date until December 31, 2017, or such earlier date that Mr. Coughlin’s employment with the Company terminates, in order to provide transition services to his successor and other Company employees.

**OUR BOARD OF DIRECTORS RECOMMENDS
A VOTE “FOR” PROPOSAL FOUR**

EQUITY COMPENSATION PLANS

The following table sets forth information regarding all of the Company's equity compensation plans as of March 31, 2017:

<u>Plan Category</u>	<u>Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)</u>	<u>Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column a) (c)</u>
Equity compensation plans approved by security holders (1)	6,625,683	\$23.97	5,303,754
Equity compensation plans not approved by security holders (2)	<u>545,745</u>	<u>\$36.72</u>	<u>42,494</u>
Total	<u>7,183,346</u>	<u>\$24.98</u>	<u>5,324,656</u>

- (1) The number of securities remaining available for future issuance under equity compensation plans as of March 31, 2017 are from the 2011 Plan. The shares available for issuance under the 2011 Plan may be issued in the form of option awards, restricted stock awards, restricted stock unit awards or stock bonus awards subject to limitations set forth in the 2011 Plan. In addition to the above, the Company had approximately 1,357,000 restricted stock units outstanding as of March 31, 2017.
- (2) Consists of shares of common stock issuable pursuant to employment commencement nonstatutory stock option awards.

PROPOSAL FIVE: RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

General

The Audit Committee has selected Ernst & Young LLP to audit the financial statements of the Company for the current fiscal year ending December 31, 2017. Ernst & Young LLP has audited the Company's financial statements since 1992. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting, will have the opportunity to make a statement if they so desire, and are expected to be available to respond to appropriate questions.

Stockholders are not required to ratify the selection of Ernst & Young LLP as the Company's independent registered public accounting firm. However, the Audit Committee is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in their discretion may direct the selection of a different independent registered public accounting firm at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

Vote Required

The affirmative vote of the holders of a majority of the shares represented in person or by proxy at the Annual Meeting will be required to approve and ratify the Audit Committee's selection of Ernst & Young LLP. **The Board of Directors unanimously recommends voting "FOR" approval and ratification of such selection.** In the event of a negative vote on such ratification, the Audit Committee will reconsider its selection.

EXECUTIVE OFFICERS

As of the Record Date, our executive officers were as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Kevin C. Gorman, Ph.D.	59	Chief Executive Officer and Director
David-Alexandrè C. Gros, M.D.	44	President, Chief Operating Officer and Interim Chief Financial Officer
Christopher F. O'Brien, M.D.	60	Chief Medical Officer
Eric Benevich	51	Chief Commercial Officer
Haig P. Bozigian, Ph.D.	59	Chief Development Officer
Kyle Gano, Ph.D.	44	Chief Business Development Officer
Dimitri E. Grigoriadis, Ph.D.	59	Chief Research Officer
Darin Lippoldt	51	Chief Legal Officer and Corporate Secretary
Malcolm Lloyd-Smith	61	Chief Regulatory Officer

See above for biographical information concerning Kevin C. Gorman, Ph.D.

David-Alexandrè C. Gros, M.D. became President and Chief Operating Officer in January 2017. Prior to joining Neurocrine, he was Senior Vice President, Chief Business Officer and Principal Financial Officer, and was a member of the Management Board of Alnylam Pharmaceuticals, Inc. Prior to joining Alnylam in June 2015, Dr. Gros served as Executive Vice President and Chief Strategy Officer at Sanofi SA, from September 2011 to June 2015, where he was a member of the Executive Committee. Prior to Sanofi, he held positions of increasing responsibility with a focus on biotechnology and pharmaceuticals in investment banking at Centerview Partners from 2009 to July 2011 and Merrill Lynch from 2006 to 2009, and in management consulting at McKinsey & Company prior to that time. Dr. Gros holds an M.D. from The Johns Hopkins University School of Medicine, an M.B.A. from Harvard Business School and a B.A. from Dartmouth College.

Christopher F. O'Brien, M.D. became Chief Medical Officer in January 2007 after having served as Senior Vice President of Clinical Development since 2005. He is responsible for clinical operations, regulatory affairs, drug safety, biostatistics and data management. Prior to joining Neurocrine, he was Chief Medical Officer at Prestwick Pharmaceuticals, Inc. from 2003 to 2005 and Senior Vice President of Global Medical Affairs at Elan Pharmaceuticals, Inc. from 2000 to 2003. Dr. O'Brien is currently on the Board of Directors of Verifax Corporation, a biometrics company focused on developing a dynamic signature verification system. Dr. O'Brien is a Board-Certified Neurologist and obtained his undergraduate degree in Neuroscience from Boston University, his medical degree and residency training from the University of Minnesota and fellowship training from the University of Rochester School of Medicine.

Eric Benevich was appointed Chief Commercial Officer in May 2015 and is responsible for all aspects of commercial development, marketing and sales of the Neurocrine product portfolio. Previously, Mr. Benevich was at Avanir Pharmaceuticals, Inc., from 2005 to 2015, serving most recently as Vice President of Marketing where he was responsible for NUEDEXTA[®] and commercialization of their CNS pipeline. Mr. Benevich has over 20 years of experience in the pharmaceutical industry and previously served in various positions of increasing responsibility at Peninsula Pharmaceuticals Inc., Amgen and AstraZeneca in the sales and marketing of drugs such as Enbrel[®], Epogen[®] and Prilosec[®]. Mr. Benevich has a BBA in International Business from Washington State University.

Haig P. Bozigian, Ph.D. was appointed Chief Development Officer in December 2006 after having served as Vice President of Preclinical Development. He is responsible for all pre-clinical, chemical and pharmaceutical development. Dr. Bozigian joined Neurocrine in 1997. With extensive expertise in CNS related new product development, Dr. Bozigian has participated in research and development for more than 20 years. Prior to joining Neurocrine, Dr. Bozigian served as Director of Pharmaceutical Development at Procyte Corporation, Associate

Director of Pharmacokinetics and Drug Metabolism at Sphinx Pharmaceuticals Corporation and as a Clinical Pharmacokineticist at GlaxoSmithKline. Dr. Bozigian earned his B.S. in Microbiology from the University of Massachusetts, his M.S. in Pharmacodynamics and Toxicology from the University of Nebraska Medical Center, and earned his Ph.D. in Pharmaceutical Sciences from the University of Arizona.

Kyle Gano, Ph.D. was appointed Chief Business Development Officer in 2011 and is responsible for all business and corporate development activities, including the management of ongoing collaborations with AbbVie, Mitsubishi Tanabe Pharma and Sumitomo Dainippon Pharma. From 2001 to 2011, Dr. Gano held several positions of increasing responsibility at Neurocrine spanning marketing analytics to business development. Dr. Gano received his B.S. in Chemistry from the University of Oregon, B.S. in Biochemistry from the University of Washington, and his Ph.D. in Organic Chemistry and M.B.A in Finance from the University of California, Los Angeles.

Dimitri E. Grigoriadis, Ph.D. became Chief Research Officer in January 2007 and oversees all research functions, including drug discovery, biology and chemistry. Dr. Grigoriadis joined Neurocrine in 1993, established the pharmacology and drug screening groups and was most recently a Neurocrine Fellow and Vice President of Discovery Biology. Prior to joining Neurocrine, he was a Senior Scientist in the Neuroscience group at the DuPont Pharmaceutical Company from 1990 to 1993. Dr. Grigoriadis received his B.Sc. from the University of Guelph in Ontario, Canada, and his M.Sc. and Ph.D. in Pharmacology from the University of Toronto, Ontario, Canada. He conducted his postdoctoral research at the National Institute on Drug Abuse from 1987 to 1990.

Darin Lippoldt was appointed Chief Legal Officer and Corporate Secretary in October 2014 and is responsible for all corporate legal matters. Prior to joining Neurocrine, Mr. Lippoldt served as Executive Vice President, General Counsel, and Chief Compliance Officer of Volcano Corporation, a company he joined in 2010. Prior to Volcano, Mr. Lippoldt served as Associate General Counsel at Amylin Pharmaceuticals, Inc. since 2003. He previously practiced corporate and securities law with the law firms of Fulbright & Jaworski LLP and Matthews and Branscomb, P.C. Mr. Lippoldt received a B.B.A. in Finance, an M.A. in International Relations and a J.D. from St. Mary's University.

Malcolm Lloyd-Smith was appointed Chief Regulatory Officer in September 2014 and is responsible for regulatory affairs and quality assurance. Prior to joining Neurocrine, Mr. Lloyd-Smith served at Cadence Pharmaceuticals, Inc. as Senior Vice President, Regulatory Affairs, Quality and Clinical from August 2012 to September 2014, and previously as Senior Vice President, Regulatory Affairs and Quality Assurance from August 2008. Mr. Lloyd-Smith served as Vice President and Head of Global Regulatory Affairs for Elan Pharmaceuticals, Inc. from September 2003 to August 2008, after having served in the United Kingdom as its Vice President, International Regulatory Affairs from March 2002 to August 2003. Previously, Mr. Lloyd-Smith served in various positions of increasing responsibility with DuPont Pharmaceuticals in Germany, Switzerland, USA and UK. Mr. Lloyd-Smith holds a B.Sc. in Pharmacology from the University of Leeds and a M.Sc. in Pharmacological Biochemistry from Hatfield Polytechnic.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis describes Neurocrine’s executive compensation program for 2016 and certain elements of our 2017 program. It provides qualitative information on the factors relevant to these decisions and the manner in which compensation is awarded to the following individuals who are our Named Executive Officers (“NEOs”) for 2016:

- President and Chief Executive Officer, Kevin C. Gorman, Ph.D. (1);
- Former Chief Financial Officer, Timothy P. Coughlin (2);
- Chief Commercial Officer, Eric Benevich;
- Chief Medical Officer, Christopher F. O’Brien, M.D.; and
- Chief Development Officer, Haig P. Bozigian, Ph.D.

- (1) Dr. Gorman stopped serving as our President effective January 9, 2017, when David-Alexandrè C. Gros, M.D., began serving as our President and Chief Operating Officer.
- (2) Mr. Coughlin resigned as our Chief Financial Officer effective February 15, 2017 (the “Resignation Date”), but he will remain an employee of the Company following the Resignation Date until December 31, 2017, or such earlier date that Mr. Coughlin’s employment with the Company terminates, in order to provide transition services to his successor and other Company employees.

Executive Summary

Business Overview

We are a biotechnology company focused on neurologic, psychiatric and endocrine related disorders. In April of 2017 the FDA approved INGREZZA™ (valbenazine) capsules for the treatment of adults with tardive dyskinesia (TD). INGREZZA is a novel, selective vesicular monoamine transporter 2 (VMAT2) inhibitor, and is the first and only FDA-approved product indicated for the treatment of adults with TD. We plan to commercialize INGREZZA in the United States. Our three late-stage clinical programs are: elagolix, a gonadotropin-releasing hormone antagonist for women’s health that is partnered with AbbVie Inc.; opicapone, a novel, once-daily, peripherally-acting, highly-selective catechol-o-methyltransferase inhibitor under investigation as adjunct therapy to levodopa in Parkinson’s patients; and INGREZZA under investigation for the treatment of Tourette syndrome.

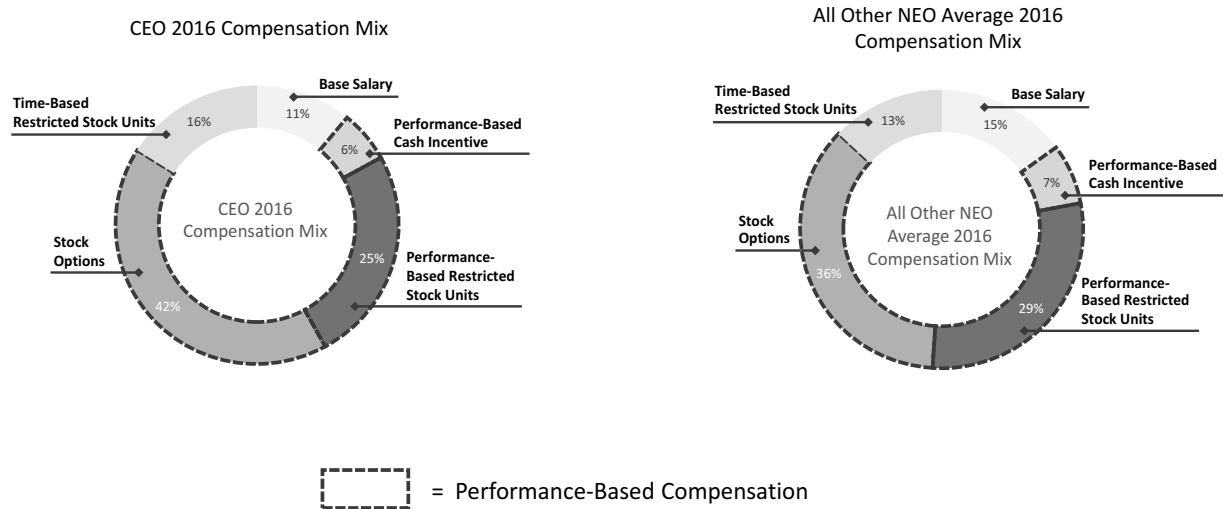
2016 Corporate Performance Highlights

2016 was a year of significant achievement for the Company as we:

- achieved acceptance of our NDA for INGREZZA for the treatment of TD;
- deployed a medical affairs team to educate physicians and increase awareness of TD in preparation for launch of INGREZZA;
- implemented a launch-ready compliance program;
- completed our strategic launch plan and built-out our commercial organization to be ready for approval;
- hired a President and Chief Operating Officer;
- continued to advance and expand our pipeline as our partner, AbbVie, successfully completed the placebo-controlled portion of the Phase III program of elagolix in women with endometriosis; and
- maintained our strong capital structure by meeting our expected expense burn and remaining on budget.

Pay for Performance/At Risk Pay

Our executive compensation program is designed to reward achievement of the specific strategic goals that we believe will advance our business strategy and create long-term value for our stockholders. Consistent with our goal of attracting, motivating and retaining a high-caliber executive team, our executive compensation program is designed to pay for performance. We utilize compensation elements that meaningfully align our NEOs' interests with those of our stockholders to create long-term value. As such, a significant portion of our CEO's and other executive officers' compensation is "at risk", performance-based compensation, in the form of long-term equity awards, and annual cash incentives that are only earned if we achieve multiple corporate metrics.



Our Compensation Practices

Below are key elements of our compensation program, as well as problematic pay practices that we avoid:

What We Do

- ✓ Heavily weight our NEO compensation toward "at risk," performance-based compensation
- ✓ Use multi-year vesting for all executive officer equity awards
- ✓ Have an incentive compensation recoupment, or clawback, policy
- ✓ Structure our executive compensation program to minimize inappropriate risk-taking
- ✓ Cap annual cash incentives at a maximum payout amount
- ✓ Select peer companies that we compete with for executive talent, have a similar business and are of similar size as us, and review their pay practices
- ✓ Solicit advice from the Committee's independent compensation consultant
- ✓ Have meaningful stock ownership guidelines for NEOs
- ✓ Have three or more independent non-employee directors serve on the Committee

What We Don't Do

- ✗ Allow for the repricing of stock options without stockholder approval
- ✗ Pay dividends or dividend equivalents on unearned shares
- ✗ Permit hedging or other forms of speculative transactions by executive officers, members of management and directors
- ✗ Provide single-trigger change in control benefits

Role of the Compensation Committee

As discussed in greater detail below, the Compensation Committee of our Board of Directors (the “Committee”) takes into consideration peer groups, survey data and advice from independent compensation consultants when setting the compensation structure and compensation philosophy for the Company. The Committee’s complete roles and responsibilities are set forth in a written charter which was adopted by the Board of Directors and is available at www.neurocrine.com. Some of the significant roles and responsibilities of the Committee include:

- reviewing and, if necessary, revising the compensation philosophy of the Company;
- reviewing and approving corporate goals and objectives relating to the compensation of the Company’s employees, including executive officers, and evaluating the performance of the Company, and its executive officers, in light of these corporate goals and objectives;
- reviewing and approving compensation for all executive officers, including perquisite benefits, if any;
- reviewing and approving all employment agreements for executive officers;
- reviewing and approving all promotions to executive officer positions and all new hires of executive officers;
- reviewing director compensation and making recommendations to the Board of Directors;
- reviewing and approving guidelines for salaries, merit salary increases, cash incentive payments, stock based grants and performance-based stock grants for all non-executive officer employees of the Company;
- reviewing and approving equity grants to non-employees of the Company, if any;
- making recommendations to the Board of Directors with regard to equity incentive plans and administering the Company’s equity incentive plans;
- reviewing and taking into consideration stockholder feedback regarding compensation matters, including our annual “say-on-pay” vote;
- retaining compensation consultants and independent advisors when appropriate to advise the Committee on compensation policies and plans;
- complying with requirements established by the SEC, assessing the risks arising from the Company’s compensation policies and taking any actions required as a result thereof; and
- preparing and approving the Compensation Discussion and Analysis to be included as part of the Company’s annual proxy statement.

Committee Actions in Connection with Say-on-Pay Vote

Our Committee is committed to ensuring that our executive compensation program is effective and aligned with our stockholders’ interests and concerns. Accordingly, a critical component of our Committee’s process has been to continue to:

- review emerging compensation “best practices” in the U.S., with a focus toward companies of similar size; and
- solicit advice from our Committee’s independent compensation consultant.

In 2016, we sought an advisory vote from our stockholders regarding our executive compensation program and received a 99.5% favorable vote supporting the program. Each year, the Committee considers the results of the advisory vote as it completes its annual review of each pay element and the compensation provided to our NEOs and other executives. Given the significant level of stockholder support, the Committee concluded that our

executive compensation program continues to align executive pay with stockholder interests and provides competitive pay that encourages retention and effectively incentivizes performance of talented NEOs and executives. Accordingly, the Committee determined not to make any significant changes to our programs as a result of the vote. The Committee will continue to consider the outcome of our say-on-pay votes and our stockholders' views when making future compensation decisions for the NEOs and executives.

Compensation Philosophy and Overall Compensation Determination Process

We believe that in order to create value for our stockholders, it is critical to attract, motivate and retain key executive talent by providing competitive compensation packages. Accordingly, we design our executive compensation programs to attract, motivate and retain executives with the skills and expertise to execute our business plans, and reward those executives fairly over time for actions consistent with creating long-term stockholder value. The market for talented individuals in the life sciences industry is highly competitive.

Our compensation philosophy for executive officers provides that cash compensation should be structured such that at least one-third of each executive officer's total cash compensation, consisting of base salary and target cash incentives, is at risk and dependent upon the Company's performance. Non-cash long-term equity compensation for executive officers is generally a combination of performance-based and time-based vesting, and is designed to motivate executive officers to increase long-term stockholder value as well as reward and retain key employees. The Committee believes that this approach provides an appropriate blend of short-term and long-term incentives to maximize stockholder value.

The implementation of the compensation philosophy is carried out under the supervision of the Committee. The Committee uses the services of an independent compensation consultant who is retained by, and reports directly to, the Committee. Management, under guidelines and procedures approved by the Committee, determines the compensation of our non-executive officer employees.

In the early part of each year, the Committee, without the presence of our Chief Executive Officer, deliberates and makes decisions regarding the base salary, target cash incentives and long-term equity award components of compensation to be awarded to our Chief Executive Officer for the new fiscal year, as well as performance-based compensation payouts for the prior fiscal year. In setting compensation for our other NEOs, the Committee solicits the input of our Chief Executive Officer, who recommends to the Committee the base salary, target cash incentives and long-term equity award components of compensation to be awarded to our NEOs for the new fiscal year, as well as performance-based compensation payouts for the prior fiscal year. The Committee remains solely responsible for making the final decisions on compensation for all of our NEOs. Our NEOs are not present during discussions of their compensation packages nor do they participate in approving any portion of their own compensation packages.

The Chief Executive Officer annually reviews the performance of each NEO (other than himself) and discusses these performance reviews with the Committee. These recommendations reflect his consideration of the market data, the performance of each NEO, internal pay equity among individuals (including qualifications and contributions to meeting our corporate objectives), criticality and scope of job function and our Chief Executive Officer's extensive industry experience. The Committee reviews and considers the market data, our Chief Executive Officer's recommendations on specific pay levels for each NEO and Radford's recommendations on compensation policy determinations for the executive officer group, and also reviews internal pay equity among individuals and positions, criticality and scope of job function, retention risk, Company performance and individual performance (including qualifications and contributions to meeting our corporate objectives), total targeted and historical compensation for each individual NEO and any other factors the Committee determines important. The Committee uses all of these factors to set the compensation of our NEOs at levels that the Committee considers to be competitive and appropriate for each NEO, using the Committee's professional experience and judgment.

The Committee generally meets at least six times per year. In the first quarter of the year, the performance of each executive officer for the prior year and peer group compensation data are reviewed by the Committee, and base salary adjustments, cash incentive payouts, following year targets and annual equity grants are discussed and approved. Also during the first quarter of the year, Company-wide performance goals for the then current year are finalized by the Committee and the Board of Directors. At mid-year meetings, the Committee reviews the Company's compensation philosophy, policies and procedures. Meetings in the fourth quarter of the year generally focus on Company goal achievement, selection of the peer group for the following year and the structure of executive officer performance reviews.

Compensation Consultants

The Committee uses the services of an independent compensation consultant who is retained by, and reports directly to, the Committee to provide the Committee with an additional external perspective with respect to its evaluation of relevant market and industry practices. The Committee selected Radford, an AON Hewitt Company, as a third-party compensation consultant to assist the Committee in establishing 2014, 2015, 2016 and 2017 overall compensation levels. Radford conducted analyses and provided advice on, among other things, the appropriate peer group, executive compensation for our executive officers and compensation trends in the life sciences industry.

In weighing its recommendations for executive compensation for the fiscal year 2016, the Committee directed Radford to advise the Committee on both best practices and peer practices when designing and modifying our compensation program for executive officers in order to achieve our objectives. As part of its duties, Radford provided the Committee with the following services with respect to 2016 compensation decisions:

- carried out a comprehensive review of our peer group for use in making 2016 executive compensation decisions;
- provided compensation data for the peer group and relevant executive pay survey data and an analysis of the compensation of the Company's executive officers as compared to this market data;
- provided a competitive assessment of, and comparison to, incentive design and executive pay program structure based on peer group data;
- conducted a comprehensive pay for performance assessment;
- provided recommendations regarding the annual cash incentive and long-term equity incentive program design for 2016;
- assisted the Committee with the design of 2016 pay programs consistent with the Company's business strategy and pay philosophy;
- provided background information and data for 2016 adjustments to the Company's executive compensation program consistent with good governance practices and the Company's objectives; and
- prepared an analysis of the Board's 2016 compensation program.

The Committee annually assesses whether the work of Radford as a compensation consultant has raised any conflict of interest, taking into consideration the following factors: (i) the provision of other services to the Company by Radford; (ii) the amount of fees the Company paid to Radford as a percentage of the firm's total revenue; (iii) Radford's policies and procedures that are designed to prevent conflicts of interest; (iv) any business or personal relationship of Radford or the individual compensation advisors employed by the firm with an executive officer of the Company; (v) any business or personal relationship of the individual compensation advisors with any member of the Committee and (vi) any stock of the Company owned by Radford or the individual compensation advisors employed by the firm. The Committee has determined, based on its analysis of the above factors, that the work of Radford and the individual compensation advisors employed by Radford as compensation consultants to the Company has not created any conflict of interest.

Peer Group

When developing a proposed list of our peer group companies to be used in connection with making compensation decisions for 2016, Radford reexamined our compensation philosophy and peer group and recommended changes to our 2015 peer group company list to reflect our growth, market capitalization and the stage of our commercial development. Radford suggested biopharmaceutical companies that were late stage pre-commercial (Phase III or recently commercial companies with minimal revenue of less than \$100 million), had market values of approximately one half (0.5x) to two-and-a-half (2.5x) our market capitalization at the time (resulting in a range of between \$2 billion to \$10 billion in market capitalization) and had headcounts of generally between 50 to 300. Based on these criteria, Radford recommended, and our Committee approved eliminating Aegerion Pharmaceuticals, Inc., Celldex Therapeutics, Inc., Keryx Biopharmaceuticals, Inc., Lexicon Pharmaceuticals, Inc., Ligand Pharmaceuticals, Inc., NewLink Genetics Corporation, Orexigen Therapeutics, Inc., PTC Therapeutics, Inc., Relypsa, Inc., Sangamo BioSciences, Inc. and Xoma Corporation (which no longer met the criteria described above), KYTHERA Biopharmaceuticals, Inc., Receptos, Inc. and Synageva BioPharma Corp. (which were acquired since the 2015 peer group company list was approved) and adding Agios Pharmaceuticals, Inc., Alnylam Pharmaceuticals, Inc., Intercept Pharmaceuticals, Inc., Ionis Pharmaceuticals, Inc., Juno Therapeutics, Inc., Kite Pharma, Inc., Portola Pharmaceuticals, Inc., Puma Biotechnology, Inc. and Ultragenyx Pharmaceutical Inc.

2016 Peer Group. Based on these parameters, in November 2015 our Committee approved the following companies as our peer group for 2016: ACADIA Pharmaceuticals, Inc., Agios Pharmaceuticals, Inc., Alnylam Pharmaceuticals, Inc., Anacor Pharmaceuticals, Inc., bluebird bio, Inc., Clovis Oncology, Inc., Dyax, Corp., Intercept Pharmaceuticals, Inc., Ionis Pharmaceuticals, Inc., Juno Therapeutics, Inc., Kite Pharma, Inc., Novavax, Inc., Portola Pharmaceuticals, Inc., Puma Biotechnology, Inc., Sarepta Therapeutics, Inc., TESARO, Inc. and Ultragenyx Pharmaceutical Inc. In determining executive compensation for 2016, the Committee reviewed data from this group of peer companies. At the time of approval of our 2016 peer group, our Company was in the 76th percentile of the peer group for market capitalization and 60th percentile of the peer group for revenue.

In early 2016, Radford completed an assessment of executive compensation based on the 2016 peer group to inform the Committee's determinations of executive compensation for 2016. This market data was compiled from multiple sources, including: (i) the 2016 peer group companies' publicly disclosed information, or public peer data and (ii) data from public biotechnology and pharmaceutical companies in the Radford Global Life Sciences Survey that had market values between \$2 billion and \$10 billion. The components of the market data were based on the availability of sufficient comparative data for an executive officer's position. The general survey data and the public peer data, collectively referred to in this proxy statement together as market data, were reviewed by the Committee, with the assistance of Radford, and used as one reference point, in addition to other factors, in setting our executive officers' compensation.

The Committee generally reviews total direct compensation, comprising both target cash compensation and equity compensation, against the market data described above primarily to ensure that our executive compensation program as a whole is positioned competitively to attract and retain the highest caliber executive officers and that the total direct compensation opportunity for the executive officer group is aligned with our corporate objectives and strategic needs. The Committee does not have a specific target compensation level for the NEOs; rather, the Committee reviews a range of market data reference points (generally at the 25th, 50th and 75th percentiles of the market data) with respect to total direct compensation, total target cash compensation (including both base salary and the target annual cash incentive) and equity compensation (valued based on an approximation of grant date fair value). In making compensation determinations, the Committee considers a variety of factors, which may include market data and a particular executive officer's experience, overall qualifications and criticality of skills to the future performance of our Company.

2017 Peer Group. In late 2016, when developing a proposed list of our peer group companies to be used in connection with making compensation decisions for 2017, Radford selected biopharmaceutical companies that were in late stage pre-commercial (Phase III or recently commercial companies with revenue generally less than

\$300 million), had market values of approximately one half (0.5x) to two-and-a-half (2.5x) our market capitalization at the time (resulting in a range of between \$2 billion to \$10 billion in market capitalization) and had headcounts of generally between 50 to 600. Based on these criteria and Radford’s recommendation, our Committee removed Clovis Oncology, Inc., Novavax, Inc. and Portola Pharmaceuticals, Inc. (which no longer met the criteria described above), Anacor Pharmaceuticals, Inc. and Dyax Corp. (which were acquired since the 2016 peer group company list was approved) and added ARIAD Pharmaceuticals, Inc., Exelixis, Inc., Ironwood Pharmaceuticals, Inc., Nektar Therapeutics, Seattle Genetics, Inc. and The Medicines Company to the remaining 2016 peers to form the final 2017 list of peer companies.

Components of Executive Compensation

The Committee considers each executive officer’s performance, contribution to Company goals, responsibilities, experience, qualifications, and where in the competitive range the executive officer’s compensation compares to the Company’s identified peer group when determining the appropriate compensation for each executive officer. The Committee considers each component of compensation independently and each component in the context of each executive officer’s total compensation. Compensation for our NEOs currently consists of three key elements that are designed to reward performance in a simple and straightforward manner: base salaries, annual performance-based cash incentives and long-term equity awards, which generally include restricted stock unit awards (“RSUs”) and stock options, which both vest based on continued service over time, and performance restricted stock units (“PRSUs”), which vest upon achievement of key corporate metrics that we believe will create shareholder value. The purpose and key characteristics of each of these elements are summarized below.

<u>Element</u>	<u>Purpose</u>	<u>Key Characteristics</u>
Base Salary	Designed to compensate competitively at levels necessary to attract and retain qualified executives in the life sciences industry; generally based on the scope of each executive officer’s responsibilities, as well as his qualifications, breadth of experience, performance record and depth of applicable functional expertise; established and adjusted to be within the range of the applicable peer group, enabling the Company to attract, motivate, reward and retain highly skilled executives; gives executives a degree of certainty in light of having a majority of their compensation at risk.	<p>Fixed compensation where year-to-year adjustments to each executive officer’s base salary are based upon sustained superior performance, changes in the general level of base salaries of persons in comparable positions within our industry, and the average merit salary increase for such year for all employees of the Company established by the Committee, as well as other factors the Committee judges to be pertinent during an assessment period.</p> <p>In making base salary decisions, the Committee exercises its judgment to determine the appropriate weight to be given to each of these factors. Adjustments may also be made during the fiscal year for promotions, highly urgent retention reasons, superior performance in response to changed or challenging circumstances, and similar special circumstances.</p>

Annual Cash Incentives	Motivates executive officers to achieve our short-term strategic plan and milestones that are designed to drive long-term growth and performance while providing flexibility to respond to opportunities and changing market conditions.	<p>Annual cash award based on corporate performance compared to pre-established corporate goals with pre-established target payouts for each executive officer.</p> <p>The cash incentive program, including corporate goals and target payouts, are reviewed and approved by the Committee annually and may include individual performance targets for each executive officer. The corporate goals are prepared in an interactive process between management and the Board of Directors based on the Company’s business plan and budget for the year. Cash incentive payments are linked to the attainment of overall corporate goals and may include individual performance targets for each executive officer. The Committee establishes the target and maximum potential amount of each executive officer’s cash incentive payment annually.</p>
Long-Term Equity Incentives (RSUs)	Motivates executive officers to achieve our business objectives by tying compensation to the performance of our common stock over the long term; motivates our executive officers to remain with the Company by mitigating swings in incentive values during periods when market volatility impacts our stock price; directly motivate an executive officer to maximize long-term stockholder value and serve as an effective tool for incentivizing and retaining those executive officers who are most responsible for influencing stockholder value.	RSUs generally vest on an annual basis, ratably over four years for executive-level grants; the ultimate value realized varies with our common stock price.
Long-Term Equity Incentives (Stock Options)	Motivates executive officers to achieve our business objectives by tying incentives to the appreciation of our common stock over the long term.	Stock options with an exercise price equal to the fair market value on the date of grant generally vesting monthly over four years for executive-level grants; the ultimate value realized, if any, depends on the appreciation of our common stock price from the date of grant.
Long-Term Equity Incentives (PRSUs)	Creates a strong link to the Company’s long-term performance, creates an ownership culture and closely aligns the interests of our executive officers with those of our stockholders because the value the grants deliver are directly dependent on our performance goal attainment.	PRSUs only vest upon achievement of objectively measurable performance goals that focus executives on achieving specific longer-term Company performance goals and increasing stockholder value.

**Other
Compensation**

Provides benefits that promote employee health and welfare, which assists in attracting and retaining our executive officers; certain additional benefits reflect market standards and are reasonable and necessary to attract and/or retain each of our executive officers and allow the executive officers to realize the full benefit of the other elements of compensation we provide.

Executive officers are eligible to participate in the Company's employee benefit plans on the same terms as all other full-time employees. These plans include medical, dental and life insurance. Additional benefits include disability insurance premiums, an annual physical examination and financial planning services.

The terms of the Company's 401(k) Savings Plan (the "401(k) Plan") provide for executive officer and broad-based employee participation on the same general terms. Under the 401(k) Plan, all Company employees are eligible to receive basic matching contributions from the Company that vest three years from date of hire and monthly thereafter.

**Severance
and Change
in Control
Benefits**

Serves our retention objectives by helping our NEOs maintain continued focus and dedication to their responsibilities to maximize stockholder value, including in the event of a transaction that could result in a change in control of the Company.

Provides protection in the event of a termination of employment under specified circumstances, including following a change in control of the Company as described below under "Potential Payments Upon Termination or Change-in-Control".

Compensation components for executive officers in the event of a termination by the Company without cause or termination by the executive officer due to constructive termination within six months after the consummation of a change in control include payments for accrued annual base salary, a cash compensation payment, cash compensation for the value of all outstanding stock awards, limited Company-paid health insurance benefits, and any accrued vacation and any accrued benefits under any plans of the Company in which the executive officer is a participant.

Certain individuals whose offer letters were entered into before 2007, including Dr. Gorman, Dr. O'Brien, Mr. Coughlin and Dr. Bozigian, are entitled to tax gross-ups in the event of

a change in control. We have not entered into any new change in control gross-ups for executive officers since 2007, nor does the Company intend to enter into any new agreements containing such gross-ups. Accordingly, Mr. Benevich's employment agreement does not provide for a tax gross-up.

Eligibility for these benefits requires a signed release agreement by the executive officer.

2016 Executive Compensation Decisions

Base Salary

In February 2016, our Committee reviewed and determined the 2016 base salaries for each of the NEOs as set forth in the table below. In making these 2016 decisions, the Committee considered the positioning of each individual's salary as compared to the peer data, as well as the individual's historical salary levels, our then-current budget for employee salary adjustments and anticipated role and responsibilities for the coming year. Although the Committee does not have a specific target compensation level for each NEO, the NEOs' salaries are generally within the 50th to 75th percentiles of the peer data.

<u>Executive Officer</u>	<u>2016 Base Salary</u>	<u>% Change from 2015</u>
Kevin Gorman	\$592,000	2.96%
Timothy Coughlin	\$434,700	3.01%
Eric Benevich	\$376,000	3.01%
Christopher O'Brien	\$487,000	3.00%
Haig Bozigian	\$395,000	3.51%

Pursuant to a transition agreement with the Company, Mr. Coughlin's base salary decreased from \$434,700 to \$310,000 effective as of the Resignation Date. Mr. Coughlin will receive this reduced base salary until December 31, 2017, or such earlier date that Mr. Coughlin's employment with the Company terminates.

Annual Cash Incentives

In February 2016, the Board of Directors approved the Company's executive officer cash incentive target percentages and performance goals for 2016. The table below sets forth the minimum target and maximum cash incentive targets for our Chief Executive Officer and other executive officers for 2016. The target percentage is paid as a percentage of such executive officer's base salary. For example, if 100% of the Company's performance goals are achieved for 2016, this would yield our Chief Executive Officer a cash incentive award of 60% of his 2016 base salary. The target percentages were generally set at the 50th percentile of the peer group data for Dr. Gorman and above the 75th percentile of the peer group data for the other executive officers.

<u>Executive Officer</u>	<u>Minimum Payout</u>	<u>Target Percentage of Base Salary</u>	<u>Maximum Bonus Payout</u>
Chief Executive Officer	0%	60%	72%
All Other Executive Officers	0%	50%	60%

In early 2016, the Committee established the corporate goals described below. We are a clinical-stage biopharmaceutical company and so our objective corporate goals are directly aligned with our specific strategic goals, including advancing our development programs, our research function, our clinical activities, pre-commercialization activities and certain corporate and financial goals, which we believe will create long-term value for stockholders. The Board of Directors and the Committee did not assign specific relative weightings to the goals for 2016. In February 2017, the Committee evaluated the accomplishments and performance of the Company against such corporate goals. After its consideration of the Company's performance, as more specifically described below, the Committee rated our 2016 corporate achievement at 90% of our 2016 corporate goals.

Corporate Goal

Acceptance of our NDA for INGREZZA for the treatment of TD with full regulatory, CMC and clinical systems in place to support review

Implement a launch-ready compliance program

Fully deploy our medical affairs team to educate physicians and increase awareness of TD

Complete our strategic launch plan and build-out of our commercial organization to be ready for approval

Corporate Achievement

Successful completion of:

- achieving positive results from pivotal trials for INGREZZA for treatment of TD
- submitting NDA to FDA for INGREZZA for the treatment of TD, and receiving acceptance for priority review of our NDA for INGREZZA for the treatment of TD
- fully staffing our quality assurance, compliance, and regulatory groups for commercial readiness
- identifying and engaging thought leaders and patient advocacy groups
- enhancing our commercialization launch plan and market models, and extending our compliance program consistent with transitioning to a company with a commercial product
- hiring and deploying a medical affairs team to educate physicians and increase awareness of TD
- identifying and sponsoring continuing medical education programs with a TD focus and launching an unbranded TD disease education campaign
- achieving staffing targets for marketing, payer relations, health economics and outcomes, commercial operations and sales management personnel
- building backbone infrastructure needs for commercial launch
- initiating recruitment of approximately 140 sales representatives across the United States
- hiring a President and Chief Operating Officer

- Advance and expand our product pipeline
 - completing a placebo-controlled portion of two Phase III studies of elagolix in women with endometriosis by our partner, AbbVie
 - initiating three clinical trials of INGREZZA in Tourette syndrome
 - completing a Phase I trial of a proprietary compound to treat Essential Tremor
 - submitting an Investigational New Drug (IND) application to the FDA for a new compound to treat patients with classic congenital adrenal hyperplasia (CAH)
- Meet our operations and cash burn budgets
 - maintaining our strong capital structure by meeting our expected expense burn and remaining on budget during 2016

In February 2017, after making these determinations regarding level of corporate performance achieved against the pre-established performance goals, the Committee reviewed and approved corporate cash incentives as set forth in the table below. The Committee may, in its sole discretion, eliminate any individual cash incentive or reduce or increase the amount of compensation payable with respect to any individual cash incentive. The Committee exercised its discretion to increase the amount of individual cash incentives with respect to Dr. Gorman, Dr. O’Brien and Dr. Bozigian for 2016 by paying their cash incentives at the rates noted below, rather than 90%, due to their significant individual performances related to successfully filing an NDA and having the FDA accept it for priority review.

<u>Name</u>	<u>2016 Target Annual Cash Incentive</u>		<u>2016 Actual Annual Cash Incentive Paid</u>	
	<u>% of Base Salary</u>	<u>\$</u>	<u>% of Target Annual Cash Incentive</u>	<u>\$</u>
Kevin Gorman	60%	\$355,200	95%	\$337,440
Timothy Coughlin . . .	50%	\$217,350	90%	\$195,615
Eric Benevich	50%	\$188,000	90%	\$169,200
Christopher O’Brien	50%	\$243,500	100%	\$243,500
Haig Bozigian	50%	\$197,500	100%	\$197,500

Long-Term Equity Awards

Size of Equity Awards. In determining the size of the total equity compensation opportunity in 2016, the Committee:

- aimed to have the aggregate target award value result in target total direct compensation at a level that is competitive in the marketplaces in which we compete;
- focused a larger portion of total direct compensation in the form of long-term and performance-based equity awards intended to drive long-term differentiated value relative to our peers and maximize long-term stockholder value;
- aimed to structure a substantial portion of equity opportunity in the form of awards that vest based on achievement of performance goals to better align our executives’ long-term compensation opportunity with our stockholders’ interests; and
- considered the recommendations of Dr. Gorman for the other NEOs.

Equity Award Mix. The Committee determined that the equity awards granted to the NEOs in February 2016 should consist of stock options, time-vesting RSU grants and performance-vesting PRSU grants as set forth in the

table below. The Committee determined these three types of equity awards provided the appropriate balance of long-term incentives for our executive officers. Specifically, PRSUs that vest based on objectively measurable performance goals focus executives on achieving specific longer-term Company performance goals and increasing stockholder value, and RSUs that vest over time provide tangible value to executive officers and serve as an incentive and retention tool during a difficult operating or volatile business environment, while still being tied to our stockholder value. It is the Committee's view that stock options are inherently performance oriented because the executive realizes no value from stock options unless and until the Company's stock price increases over the strike price. The Committee believes it is important to evaluate the equity award mix each year to determine what types of equity awards should be granted. For example, in February 2017 the Committee did not award any performance-vesting PRSUs.

In setting the mix of the three types of equity awards for 2016, the Committee determined that a substantial portion of the equity grants should consist of awards that vest based on our performance (in the form of specific and measurable performance goals), in addition to continued service over time. The mix between the three types of awards were determined based on market data of the equity award practices of peer group companies provided by the Committee's consultant, with the aim that performance-based awards comprise a meaningful portion of each executive officer's total award. Accordingly, the Committee structured the mix of equity such that the baseline award of options and RSUs would generally deliver value, as determined by the Black-Scholes value of stock options and the value of RSUs as if they were fully vested, to NEOs between the 50th and 75th percentiles with PRSUs providing the opportunity for above-market pay if earned. The opportunity for higher performance-based compensation opportunity reflects our commitment to pay for performance, with compensation above the median of our peers for exceptional performance and compensation below this level if our performance goals are not reached.

<u>Executive Officer</u>	<u>Stock Options</u>	<u>RSU – Time Vesting</u>	<u>PRSU – Performance Vesting (Target)</u>
Kevin Gorman	109,100	23,000	35,750
Timothy Coughlin	48,500	10,200	20,500
Eric Benevich	41,200	8,700	20,500
Christopher O'Brien	60,600	12,800	30,500
Haig Bozigian	48,500	10,200	20,500

2016 Award Vesting Criteria. The Committee, in consultation with the independent members of the Board of Directors, determined with respect to the February 5, 2016 equity grants that the use of both stock options which vest monthly, on a pro-rata basis, over a four-year period and RSUs which vest annually, on a pro-rata basis, over a four-year period were the appropriate equity compensation vehicles. The Committee and Board of Directors believe that the long-term equity based compensation awards closely align stockholder and management interests.

In addition, the Committee, on February 5, 2016, in consultation with the independent members of the Board of Directors, also carefully set the PRSU award goals to be rigorous and ultimately serve to align management and our stockholders' interests. The 2016 PRSUs vest upon 1) obtaining positive pivotal clinical trial data for the treatment of Tourette syndrome with valbenazine as determined by the Committee and 2) the FDA's acceptance of the Company's NDA submission of valbenazine for the treatment of Tourette syndrome. Vesting of these awards would represent the culmination of several years of effort, including success in clinical development and the successful navigation of the regulatory submission process. If the vesting criteria are achieved, we believe significant stockholder value will be created. Additionally, these PRSUs have a limited term of four years for the Company to achieve the objectives required for vesting. The individual PRSUs either fully vest upon completion of the corporate objectives within such four-year period or never vest.

Retirement Benefits

The Company’s matching contribution to the 401(k) Plan for 2016 was 50% of eligible participant contributions, subject to applicable federal limits. The Company made no additional discretionary contributions to the 401(k) Plan in 2016.

Equity Ownership Guidelines

In March 2014, the Committee approved equity ownership guidelines for our executive officers. The equity ownership guidelines are designed to further align the interests of the executive officers with those of our stockholders by ensuring that our executive officers have a meaningful financial stake in the Company’s long-term success. The equity ownership guidelines establish a minimum equity ownership level by position, with such values determined based on the value of our ordinary shares owned by such persons as of certain measurement dates. All shares directly or beneficially owned by the executive officer, including the net exercisable value of outstanding vested stock options (where the market price of our common shares exceeds the strike price of such option) are included in determining the value of equity owned under our equity ownership guidelines. The equity ownership requirements are as follows:

Chief Executive Officer	3 times base salary
All other executive officers	1 times base salary

New executive officers are granted a five-year period to reach the equity ownership requirements set forth in the guidelines; and are expected to make annual progress toward the equity ownership requirements during this five-year period. When an executive officer does not meet the equity ownership requirements set forth in the guidelines, he/she is restricted from selling any held shares until such requirements are met. Additionally, should an executive officer who does not meet the equity ownership requirements choose to exercise a stock option or vest in any RSUs, he or she is required to retain all shares acquired through those transactions, aside from any shares necessary to fulfill such transaction related tax obligations, until full compliance with the equity ownership guidelines is attained.

Annual compliance with the equity ownership guidelines is assessed during the first quarter of each year. As of March 31, 2017, each of our NEOs is in compliance with the equity ownership guidelines.

Equity Trading Policies and Procedures

The Company has policies and procedures to prohibit direct or indirect participation by employees of the Company in transactions involving trading activities in Company common stock which by their aggressive or speculative nature may give rise to an appearance of impropriety. Such prohibited activities would include the purchase of put or call options, or the writing of such options as well as short sales, hedging transactions such as “cashless” collars, forward sales, equity swaps and other related arrangement which may indirectly involve short-sale and any other transactions designed for profit from short-term movement in the Company’s stock price.

Additionally, transactions in which Company common stock is margined or pledged to secure a loan must be pre-approved by the Company’s Chief Financial Officer or Chief Legal Officer based on guidelines adopted by the Nominating/Corporate Governance Committee.

To the Company’s knowledge, there were no transactions involving hedging, pledging or margining Company common stock during 2016, nor were there any such transactions as of the Record Date.

The Company also requires executive officers and directors to complete all equity related open-market purchase and sale transactions via a 10b5-1 plan. The 10b5-1 plans typically cover, among other transactions, direct sales and purchases of Company stock, as well as same-day-sales related to option exercises and sales of stock for tax payments upon the vesting of restricted stock units. All 10b5-1 plans are required to have a 90-day

waiting period from the election date to the date of the first transaction. Additionally, Company policy restricts the executive officers and directors from amending, canceling, suspending or otherwise modifying any 10b5-1 trading plan subsequent to adoption of the plan.

Compensation Recovery Policy

In February 2017, we adopted a clawback policy, even though the SEC has not yet issued final rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act requirement. Our policy currently provides that, in the event that (i) we are required to prepare an accounting restatement for any fiscal quarter or year due to our material noncompliance with any financial reporting requirement and (ii) it is determined that misconduct contributed to the noncompliance that resulted in the obligation to restate our financial statements, we may take action to recover from any officer whose misconduct contributed to the noncompliance which resulted in the obligation to restate our financial statements, the incentive compensation that was paid or vested to such officer during the twelve-month period preceding the restatement obligation. We will also comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and will modify our policy to the extent required by law once the SEC adopts final regulations on the subject.

Tax Considerations

Internal Revenue Code Section 162(m)

The Committee considers the potential impact under Internal Revenue Code Section 162(m) whereby we can only deduct up to \$1.0 million of the compensation we pay to named executive officers each taxable year unless such compensation is “performance-based compensation” within the meaning of the Internal Revenue Code. The Committee has determined that any gain related to the exercise of a stock option granted under any of our stockholder-approved stock option plans with an exercise price at least equal to the fair value of our common stock on the date of grant qualifies under the Internal Revenue Code as performance-based compensation and therefore is not subject to the \$1.0 million limitation. However, deductibility is not the sole factor used by the Committee in ascertaining appropriate levels or manner of compensation and corporate objectives may not necessarily align with the requirements for full deductibility under Section 162(m). Accordingly, we may enter into executive officer compensation arrangements under which payments are not deductible under Section 162(m).

Internal Revenue Code Section 409A

Section 409A governs deferred compensation arrangements. The Committee structures our deferred compensation programs with the assistance of our external counsel to be exempt from, or compliant with, Section 409A.

Accounting Considerations

The Company accounts for equity compensation paid to our employees under the FASB ASC Topic 718, which requires us to estimate and record an expense over the service period of the equity award. Our cash compensation is recorded as an expense at the time the obligation is incurred. The accounting impact of our compensation programs are one of many factors that the Committee considers in determining the structure and size of our executive compensation programs.

Risk Analysis of Our Compensation Program

Our Committee has reviewed our compensation policies as generally applicable to our employees and believes that our policies do not encourage excessive or inappropriate risk taking and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on the Company. As part of its assessment, the Committee considered, among other factors, the allocation of compensation among base salary

and short- and long-term compensation, our approach to establishing Company-wide and individual financial, operational and other performance targets, our bonus structure of payouts at multiple levels of performance (including maximum payout caps and payments for performance below target levels) and the nature of our key performance metrics. We believe these practices encourage our employees to focus on sustained, long-term Company growth, which we believe will ultimately contribute to the creation of stockholder value.

EXECUTIVE COMPENSATION AND OTHER INFORMATION

Summary Compensation Table The following table sets forth the compensation paid by the Company for the fiscal years ended December 31, 2014, 2015 and 2016 to the NEOs named below.

Summary Compensation Table

Name and Principal Position (1)	Year	Salary \$(2)	Bonus \$(2)	Stock Awards \$(3)	Option Awards \$(4)	All Other Compensation \$(5)	Total (\$)
Kevin C. Gorman, Ph.D. President and Chief Executive Officer (1)	2014	\$557,300	\$401,256	\$2,546,700	\$2,408,000	\$ 39,596	\$5,952,852
	2015	\$575,000	\$345,000	\$ 824,750	\$3,225,000	\$ 42,217	\$5,011,967
	2016	\$592,000	\$337,440	\$2,114,413	\$2,202,729	\$ 43,076	\$5,289,658
Timothy P. Coughlin Chief Financial Officer (1)	2014	\$409,700	\$245,820	\$1,743,510	\$1,183,360	\$ 34,815	\$3,617,205
	2015	\$422,000	\$211,000	\$ 395,880	\$1,720,000	\$ 37,005	\$2,785,885
	2016	\$434,700	\$195,615	\$1,250,608	\$2,364,830	\$ 36,058	\$4,281,811
Christopher F. O'Brien, M.D. . . . Chief Medical Officer	2014	\$459,000	\$275,400	\$1,743,510	\$1,183,360	\$ 24,818	\$3,686,088
	2015	\$472,800	\$236,400	\$ 395,880	\$1,612,500	\$ 27,105	\$2,744,685
	2016	\$487,000	\$243,500	\$1,558,367	\$1,223,514	\$ 28,211	\$3,540,592
Eric Benevich Chief Commercial Officer	2014	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
	2015	\$218,532	\$109,300	\$1,044,500	\$1,648,200	\$221,961	\$3,242,493
	2016	\$376,000	\$169,200	\$1,050,908	\$ 831,828	\$ 62,663	\$2,490,599
Haig P. Bozigian, Ph.D. Chief Development Officer	2014	\$363,400	\$218,040	\$1,723,920	\$1,032,000	\$ 39,589	\$3,376,949
	2015	\$381,600	\$190,800	\$ 362,890	\$1,397,500	\$ 39,024	\$2,371,814
	2016	\$395,000	\$197,500	\$1,104,893	\$ 979,215	\$ 40,278	\$2,716,886

- (1) The titles and capacities set forth in the table above are as of the Record Date, other than (i) Dr. Gorman stopped serving as the Company's President effective January 9, 2017, when David-Alexandr  C. Gros, M.D. began serving as the Company's President and Chief Operating Officer and (ii) Mr. Coughlin resigned as the Company's Vice President and Chief Financial Officer effective February 15, 2017.
- (2) Salary and bonus figures represent amounts earned during each respective fiscal year, regardless of whether part or all of such amounts were paid in subsequent fiscal year(s).
- (3) Stock awards consist of restricted stock units and performance restricted stock units and may be subject to deferred delivery arrangements. The amounts shown are the full grant date fair value in accordance with ASC 718. The fair values of restricted stock units granted in 2014, 2015 and 2016 are based on the Company's closing market price per share on the grant date, which was \$19.59 for all 2014 grants, \$32.99 for all 2015 grants other than Mr. Benevich's grant, for which it was \$41.78, and which was \$35.99 for all 2016 grants.
- (4) The amounts shown are the full grant date fair value in accordance with Accounting Standards Codification 718-10, Compensation—Stock Compensation (ASC 718). The assumptions used to calculate the grant date fair value of stock awards are set forth under Note 8 of the Notes to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on February 14, 2017. The grant date fair values of option awards for 2014, 2015 and 2016 (other than

Mr. Benevich's 2015 option award) are based on per share Black-Scholes values of \$13.77, \$21.50 and \$20.19, respectively. Mr. Benevich's 2015 option award is based on a per share Black-Scholes value of \$27.47.

(5) Includes all other compensation as described in the table below.

All Other Compensation Table

Name	Year	401(k) Employer Match	Insurance Premiums (1)	Relocation Expense	Total Other
Kevin C. Gorman, Ph.D.	2014	\$7,650	\$31,946	\$ —	\$ 39,596
	2015	\$7,950	\$34,267	\$ —	\$ 42,217
	2016	\$7,950	\$35,126	\$ —	\$ 43,076
Timothy P. Coughlin	2014	\$7,650	\$27,165	\$ —	\$ 34,815
	2015	\$7,950	\$29,055	\$ —	\$ 37,005
	2016	\$7,950	\$28,108	\$ —	\$ 36,058
Christopher F. O'Brien, M.D.	2014	\$7,650	\$17,168	\$ —	\$ 24,818
	2015	\$7,950	\$19,155	\$ —	\$ 27,105
	2016	\$7,557	\$20,654	\$ —	\$ 28,211
Eric Benevich	2014	\$ —	\$ —	\$ —	\$ —
	2015	\$6,388	\$15,574	\$100,000	\$221,961 (2)
	2016	\$7,393	\$28,454	\$ 26,816	\$ 62,663
Haig P. Bozigian, Ph.D.	2014	\$7,650	\$31,939	\$ —	\$ 39,589
	2015	\$7,950	\$31,074	\$ —	\$ 39,024
	2016	\$7,950	\$32,328	\$ —	\$ 40,278

(1) The amounts in this column represent the costs for medical insurance for Company-wide plans, as well as disability insurance premiums and related tax gross-up amounts.

(2) Amount also includes a \$100,000 sign-on bonus.

Grants of Plan-Based Awards During the Fiscal Year Ended December 31, 2016

The following table sets forth certain information regarding plan based-awards granted by the Company during the year ended December 31, 2016 to the NEOs below:

Name	Grant Date or Modification Date	Estimated Future Payouts Under Equity Incentive Plan Awards Target (#) (1)	All Other Stock Awards: Number of Shares of Stock or Units (#) (2)	All Other Option Awards: Number of Securities Underlying Options (#) (2)	Exercise or Base Price of Awards (\$/Sh) (2)	Grant Date Fair Value or Fair Value Related to Modification of Awards (3)
Kevin C. Gorman, Ph.D.	02/05/2016	—	23,000	—	—	\$ 827,770
	02/05/2016	35,750	—	—	—	\$1,286,643
	02/05/2016	—	—	109,100	\$35.99	\$2,202,729
Timothy P. Coughlin	02/05/2016	—	10,200	—	—	\$ 367,098
	02/05/2016	20,500	—	—	—	\$ 737,795
	02/05/2016	—	—	48,500	\$35.99	\$ 979,215
	12/20/2016 (4)	—	—	85,000	\$ 5.76	\$ 46,868
	12/20/2016 (4)	—	—	120,000	\$ 8.66	\$ 140,150
	12/20/2016 (4)	—	—	86,000	\$ 8.65	\$ 100,230
	12/20/2016 (4)	—	—	86,000	\$19.59	\$ 394,815
	12/20/2016 (4)	—	—	80,000	\$32.99	\$ 480,022
	12/20/2016 (4)	—	—	48,500	\$35.99	\$ 223,530
	12/20/2016 (4)	—	7,000	—	—	\$ 70,446
12/20/2016 (4)	—	9,000	—	—	\$ 41,913	
12/20/2016 (4)	—	10,200	—	—	\$ 33,356	
Christopher F. O'Brien, M.D.	02/05/2016	—	12,800	—	—	\$ 460,672
	02/05/2016	30,500	—	—	—	\$1,097,695
	02/05/2016	—	—	60,600	\$35.99	\$1,223,514

<u>Name</u>	<u>Grant Date or Modification Date</u>	<u>Estimated Future Payouts Under Equity Incentive Plan Awards Target (#) (1)</u>	<u>All Other Stock Awards: Number of Shares of Stock or Units (#) (2)</u>	<u>All Other Option Awards: Number of Securities Underlying Options (#) (2)</u>	<u>Exercise or Base Price of Awards (\$/Sh) (2)</u>	<u>Grant Date Fair Value or Fair Value Related to Modification of Awards (3)</u>
Eric Benevich	02/05/2016	—	8,700	—	—	\$313,113
	02/05/2016	20,500	—	—	—	\$737,795
	02/05/2016	—	—	41,200	\$35.99	\$831,828
Haig P. Bozigian, Ph.D.	02/05/2016	—	10,200	—	—	\$367,098
	02/05/2016	20,500	—	—	—	\$737,795
	02/05/2016	—	—	48,500	\$35.99	\$979,215

- (1) Represents the target number of shares that may be earned under the PRSUs granted to NEOs in 2016 under the Company’s 2011 Plan. The PRSUs did not include threshold or maximum award amounts. The PRSUs vest upon the date the Company has achieved both (i) obtaining positive clinical trial data for the treatment of Tourette’s syndrome with valbenazine and (ii) FDA acceptance of a New Drug Application for the treatment of Tourette’s syndrome with valbenazine. The PRSUs have a limited term of four years to obtain these goals.
- (2) All options and restricted stock units were granted and approved on the same date with option awards having an exercise price equal to the closing market price of the Company’s common stock on the date of grant. All option awards are time-based awards, which vest monthly, on a pro-rata basis, over four years and have an option term of ten years. These RSUs vest annually, on a pro-rata basis, over a four-year period.
- (3) Reflects the grant date per share Black-Scholes value of \$20.19 for option awards and the grant date per share value of \$35.99 for restricted stock units, each granted on February 5, 2016 which was calculated in accordance with ASC 718.
- (4) Represents equity awards held by Mr. Coughlin outstanding prior to December 20, 2016 that were modified effective December 20, 2016 as more fully described in “Agreements with Named Executive Officers” discussed below. There were no other modifications to the terms of these equity awards, including no modification of the exercise prices of stock options. Such equity awards represent equity awards that were originally granted prior to December 20, 2016, in the case of option awards, at the exercise price on the original grant date, with the shares as shown representing the number of shares subject to such equity awards on the modification date, and the amount reported in the “Grant Date Fair Value or Fair Value Related to Modification of Awards” column with respect to the modified equity awards representing the incremental fair value on the modification date associated with those modified equity awards, which was determined in accordance with FASB ASC Topic 718.

Agreements with Named Executive Officers

Kevin C. Gorman, Ph.D. has an employment contract that provides that: (i) Dr. Gorman will serve as the Company’s Executive Vice President and Chief Operating Officer commencing on August 1, 2007 at an initial annual salary of \$400,000, subject to annual adjustment by the Board of Directors (subsequent to entering into the employment contract, Dr. Gorman became Chief Executive Officer and his annual base salary for 2017 is \$640,000; (ii) the agreement terminates upon death, disability, termination by the Company with or without cause, constructive termination or voluntary resignation; (iii) Dr. Gorman is eligible for a discretionary annual bonus as determined by the Board of Directors, based upon achieving certain performance criteria; and (iv) each year starting in 2007 and continuing for the term of the agreement, Dr. Gorman will be eligible to receive equity awards with the number of shares, vesting terms, and exercise price as shall be determined by the Board of Directors.

Timothy P. Coughlin has an employment contract that provides that: (i) Mr. Coughlin will serve as the Company’s Vice President and Chief Financial Officer commencing on August 1, 2007 at an initial annual salary of \$275,000, subject to annual adjustment by the Board of Directors; (ii) the agreement terminates upon death, disability, termination by the Company with or without cause, constructive termination or voluntary resignation;

(iii) Mr. Coughlin is eligible for a discretionary annual bonus as determined by the Board of Directors, based upon achieving certain performance criteria; and (iv) each year starting in 2007 and continuing for the term of the agreement, Mr. Coughlin will be eligible to equity awards with the number of shares, vesting terms, and exercise price as shall be determined by the Board of Directors. In late 2016, Mr. Coughlin and the Company entered into a transition agreement that provides that: (i) from December 20, 2016 until the Resignation Date, Mr. Coughlin continued to receive his 2016 base salary of \$434,700; (ii) from the Resignation Date until December 31, 2017, or such earlier date following the Resignation Date that Mr. Coughlin and the Company mutually designate, Mr. Coughlin's employment with the Company will terminate (the "Employment Termination Date"). During the period between the Resignation Date and the Employment Termination Date (the "Transition Period"), Mr. Coughlin will continue to serve as an employee of the Company as a Vice President, but will no longer have the powers, duties and responsibilities commensurate with the position of Chief Financial Officer. During the Transition Period, Mr. Coughlin will (i) receive a reduced base salary of \$310,000; (ii) continue to remain eligible for vacation and other benefits and expense reimbursement pursuant to the terms of his employment agreement; (iii) continue to remain eligible to receive his annual cash incentive bonus payment for 2016, with a target bonus percentage of 50% and a maximum bonus percentage of 60%, as determined by the Board of Directors and/or its Compensation Committee; and (iv) remain eligible to participate in the Company's cash incentive bonus program for 2017, as determined by the Board of Directors and/or its Compensation Committee, with a reduced target bonus percentage of 40% and a reduced maximum bonus percentage of 48%. Pursuant to the transition agreement, Mr. Coughlin is not entitled to any further stock awards or equity grants from the Company but any stock awards and equity grants previously granted to Mr. Coughlin will continue to vest and become exercisable during the Transition Period in accordance with their terms. The equity awards previously granted to Mr. Coughlin under the 2011 Plan and then held by him, other than certain performance-based restricted stock units granted to Mr. Coughlin in February 2016 (collectively, the "Covered Awards"), shall continue to vest and become exercisable following the Employment Termination Date, and any such equity award that is a stock option shall remain exercisable until three months following the last vesting date with respect to any of the Covered Awards, but no later than the end of the original full term of such stock option. Except as modified by the transition agreement, Mr. Coughlin's employment agreement remains in full force and effect until the Employment Termination Date.

Christopher F. O'Brien, M.D. has an employment contract that provides that: (i) Dr. O'Brien will serve as the Company's Senior Vice President, Clinical Development and Chief Medical Officer commencing on August 1, 2007 at an initial annual salary of \$350,000, subject to annual adjustment by the Board of Directors (Dr. O'Brien's annual base salary for 2017 is \$501,600); (ii) the agreement terminates upon death, disability, termination by the Company with or without cause, constructive termination or voluntary resignation; (iii) Dr. O'Brien is eligible for a discretionary annual bonus as determined by the Board of Directors, based upon achieving certain performance criteria; and (iv) Dr. O'Brien is eligible to receive equity awards with the number of shares, vesting terms, and exercise price as shall be determined by the Board of Directors.

Eric Benevich has an employment contract that provides that: (i) Mr. Benevich will serve as the Company's Chief Commercial Officer commencing on May 26, 2015 at an initial annual salary of \$365,000, subject to annual adjustment by the Board of Directors (Mr. Benevich's annual base salary for 2017 is \$410,000); (ii) the agreement terminates upon death, disability, termination by the Company with or without cause, constructive termination or voluntary resignation; (iii) Mr. Benevich is eligible for a discretionary annual bonus as determined by the Board of Directors, based upon achieving certain performance criteria; and (iv) Mr. Benevich is eligible to receive stock option awards with the equity awards with the number of shares, vesting terms, and exercise price as shall be determined by the Board of Directors.

Haig P. Bozigian, Ph.D. has an employment contract that provides that: (i) Dr. Bozigian will serve as the Company's Senior Vice President, Pharmaceutical and Preclinical Development commencing on August 1, 2007 at an initial annual salary of \$260,000, subject to annual adjustment by the Board of Directors (Dr. Bozigian's annual base salary for 2017 is \$408,800); (ii) the agreement terminates upon death, disability, termination by the Company with or without cause, constructive termination or voluntary resignation; (iii) Dr. Bozigian is eligible

for a discretionary annual bonus as determined by the Board of Directors, based upon achieving certain performance criteria; and (iv) Dr. Bozigian is eligible to receive stock option awards with the number of shares and exercise price as shall be determined by the Board of Directors.

Outstanding Equity Awards at Fiscal Year-End. The following table sets forth the outstanding equity awards held by the NEOs at December 31, 2016.

Name	Option Awards						Stock Awards		
	Award Grant and Commencement of Vesting Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$)
Kevin C. Gorman,									
Ph.D.	05/11/2010	85,900 (4)	—	—	\$ 2.59	05/11/2017	—	—	—
	08/25/2011	250,000 (4)	—	—	\$ 5.76	08/25/2021	—	—	—
	01/12/2012	240,000 (2)	—	—	\$ 8.66	01/12/2022	—	—	—
	01/10/2013	171,351 (2)	3,649 (2)	—	\$ 8.65	01/10/2023	7,500 (3)	\$290,250	—
	01/16/2014	127,602 (2)	47,398 (2)	—	\$19.59	01/16/2024	52,500 (5)	\$580,500	\$1,451,250
	02/03/2015	68,748 (2)	81,252 (2)	—	\$32.99	02/03/2025	18,750 (3)	\$725,625	—
	02/05/2016	22,728 (2)	86,372 (2)	—	\$35.99	02/05/2026	58,750 (9)	\$890,100	\$1,383,525
Timothy P. Coughlin . .	08/25/2011	85,000 (4)	—	—	\$ 5.76	08/25/2021	—	—	—
	01/12/2012	120,000 (2)	—	—	\$ 8.66	01/12/2022	—	—	—
	01/10/2013	84,206 (2)	1,794 (2)	—	\$ 8.65	01/10/2023	3,500 (3)	\$135,450	—
	01/16/2014	62,707 (2)	23,293 (2)	—	\$19.59	01/16/2024	32,000 (6)	\$270,900	\$ 967,500
	02/03/2015	36,666 (2)	43,334 (2)	—	\$32.99	02/03/2025	9,000 (3)	\$348,300	—
	02/05/2016	10,104 (2)	38,396 (2)	—	\$35.99	02/05/2026	30,700 (9)	\$394,740	\$ 793,350
Christopher F. O'Brien,									
M.D.	08/25/2011	83,750 (4)	—	—	\$ 5.76	08/25/2021	—	—	—
	01/12/2012	120,000 (2)	—	—	\$ 8.66	01/12/2022	—	—	—
	01/10/2013	84,206 (2)	1,794 (2)	—	\$ 8.65	01/10/2023	3,500 (3)	\$135,450	—
	01/16/2014	62,707 (2)	23,293 (2)	—	\$19.59	01/16/2024	32,000 (6)	\$270,900	\$ 967,500
	02/03/2015	34,374 (2)	40,626 (2)	—	\$32.99	02/03/2025	9,000 (3)	\$348,300	—
	02/05/2016	12,624 (2)	47,976 (2)	—	\$35.99	02/05/2026	43,300 (9)	\$495,360	\$1,180,350
Eric Benevich	06/01/2015	22,506 (1)	37,494 (1)	—	\$41.78	06/01/2025	25,000 (7)	\$967,500	—
	02/05/2016	8,583 (2)	32,617 (2)	—	\$35.99	02/05/2026	29,200 (9)	\$336,690	\$ 793,350
Haig P. Bozigian,									
Ph.D.	08/25/2011	125,000 (4)	—	—	\$ 5.76	08/25/2021	—	—	—
	01/12/2012	100,000 (2)	—	—	\$ 8.66	01/12/2022	—	—	—
	01/10/2013	73,436 (2)	1,564 (2)	—	\$ 8.65	01/10/2023	3,250 (3)	\$125,775	—
	01/16/2014	54,686 (2)	20,314 (2)	—	\$19.59	01/16/2024	31,500 (8)	\$251,550	\$ 967,500
	02/03/2015	29,791 (2)	35,209 (2)	—	\$32.99	02/03/2025	8,250 (3)	\$319,275	—
	02/05/2016	10,104 (2)	38,396 (2)	—	\$35.99	02/05/2026	30,700 (9)	\$394,740	\$ 793,350

- (1) Vests monthly over four years, subject to an initial one-year “cliff.”
- (2) Vests monthly over four years.
- (3) Vests annually over four years.
- (4) Vests monthly over three years.
- (5) Consists of 37,500 Performance Restricted Stock Units (“PRSUs”) and 15,000 RSUs. The RSUs vest annually over three years. The PRSUs vest upon the Company obtaining FDA approval of a New Drug Application. The PRSUs vesting provisions are entirely exclusive of the Company’s elagolix program. The PRSUs have a limited term of five years to obtain the goal.
- (6) Consists of 25,000 PRSUs and 7,000 RSUs. The RSUs vest annually over three years. The PRSUs vest upon the Company obtaining FDA approval of a New Drug Application. The PRSUs vesting provisions are entirely exclusive of the Company’s elagolix program. The PRSUs have a limited term of five years to obtain the goal.
- (7) Vests three years from date of grant.
- (8) Consists of 25,000 PRSUs and 6,500 RSUs. The RSUs vest annually over four years. The PRSUs vest upon the Company obtaining FDA approval of a New Drug Application. The PRSUs vesting provisions are entirely exclusive of the Company’s elagolix program. The PRSUs have a limited term of five years to obtain the goal.

- (9) Consists of 35,750 PRSUs and 23,000 RSUs for Dr. Gorman, 20,500 PRSUs and 10,200 RSUs for Mr. Coughlin and Dr. Bozigian, 30,500 PRSUs and 12,800 RSUs for Dr. O'Brien and 20,500 PRSUs and 8,700 RSUs for Mr. Benevich. The RSUs vest annually over four years. The PRSUs vest upon the date the Company has achieved both (1) obtaining positive pivotal clinical trial data for the treatment of Tourette's syndrome with valbenazine and (2) FDA acceptance of a New Drug Application for the treatment of Tourette's syndrome with valbenazine. The PRSUs have a limited term of four years to obtain the goal.

Option Exercises and Stock Vested During the Year. The following table sets forth the options exercised and stock awards that vested during fiscal 2016 along with their respective values at December 31, 2016 for the NEOs:

Option Exercises and Stock Vested Table

Name	Option Awards (1)		Stock Awards (2)	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$) (3)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) (4)
Kevin C. Gorman, Ph.D.	9,100	\$337,246	21,250	\$919,898
Timothy P. Coughlin	—	\$ —	10,000	\$432,457
Christopher F. O'Brien, M.D.	—	\$ —	10,000	\$432,457
Eric Benevich	—	\$ —	—	\$ —
Haig P. Bozigian, Ph.D.	—	\$ —	9,250	\$400,208

- (1) Information relates to stock option exercises during 2016.
(2) Information relates to restricted stock units and performance restricted stock units that vested during 2016.
(3) Calculated by multiplying the number of shares acquired upon exercise of stock options by the difference between the exercise price and the market price of the Company's common stock at the time of exercise.
(4) Calculated by multiplying the number of shares acquired upon vesting of restricted stock units by the average price of shares sold for purposes of satisfying federal and state income tax liabilities.

Potential Payments Upon Termination or Change-in-Control. The following tables set forth the potential severance benefits payable to the NEOs in the event of a termination prior to or following a change in control, assuming such event occurred on December 31, 2016:

Potential Payment upon Termination Table*

Name	Salary (1)	Bonus (2)	Accrued Compensation (3)	Stock Awards (4)	Medical (5)	Total
Kevin C. Gorman, Ph.D.	\$740,000	\$444,000	\$43,432	\$3,175,017	\$43,975	\$4,446,424
Timothy P. Coughlin	\$543,375	\$271,688	\$32,176	\$1,593,931	\$34,300	\$2,475,470
Christopher F. O'Brien, M.D.	\$487,000	\$243,500	\$ 2,828	\$1,123,683	\$25,367	\$1,882,378
Eric Benevich	\$376,000	\$188,000	\$ 6,515	\$ 112,086	\$35,091	\$ 717,692
Haig P. Bozigian, Ph.D.	\$395,000	\$197,500	\$41,141	\$ 987,607	\$35,162	\$1,656,410

* Reflects a termination without cause or due to a constructive termination, or deemed termination, prior to a change in control.

- (1) Based on salary as of December 31, 2016.
(2) Based on bonus targets established by the Board of Directors for 2016.
(3) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2016 and a one-time additional two-week vacation benefit for eligible employees.
(4) The amounts in this column represent the intrinsic value of 'in-the money' unvested options and restricted stock units as of December 31, 2016 that would vest in accordance with the executive officers' employment

agreements. Values were derived using the closing price of the Company's common stock on December 30, 2016 of \$38.70.

- (5) Medical is comprised primarily of health insurance premiums for the period specified in each executive officer's employment contract.

Potential Payment upon Change-in-Control Table*

<u>Name</u>	<u>Severance (1)</u>	<u>Bonus (2)</u>	<u>Accrued Compensation (3)</u>	<u>Stock Awards (4)</u>	<u>Medical (5)</u>	<u>Statutory Tax Gross-up (6)</u>	<u>Total</u>
Kevin C. Gorman, Ph.D.	\$1,184,000	\$710,400	\$43,432	\$7,034,695	\$70,360	\$—	\$9,042,887
Timothy P. Coughlin	\$ 869,400	\$434,700	\$32,176	\$3,760,769	\$54,880	\$—	\$5,151,925
Christopher F. O'Brien, M.D. . .	\$ 730,500	\$365,250	\$ 2,828	\$4,258,888	\$38,050	\$—	\$5,395,516
Eric Benevich	\$ 564,000	\$282,000	\$ 6,515	\$1,924,535	\$52,636	\$—	\$2,829,686
Haig P. Bozigian, Ph.D.	\$ 592,500	\$296,250	\$41,141	\$3,592,485	\$52,742	\$—	\$4,575,118

* Reflects benefits to be provided upon a termination without cause, or due to a constructive termination, within a specified time following a change-in-control.

- (1) Based on salary as of December 31, 2016.
(2) Based on bonus targets established by the Board of Directors for 2016.
(3) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2016 and a one-time additional two-week vacation benefit for eligible employees.
(4) The amounts in this column represent the intrinsic value of 'in-the money' unvested options and restricted stock units as of December 31, 2016 that would vest in accordance with the executive officers' employment agreements. Values were derived using the closing price of the Company's common stock on December 30, 2016 of \$38.70.
(5) Medical is comprised primarily of health insurance premiums for the period specified in each executive officer's employment contract.
(6) Represents tax gross-up payments (inclusive of the excise tax due) if total payments to executive in connection with a change-in-control exceed 2.99 times such executive's base amount by 15% or more. Based on the closing price of the Company's common stock on December 30, 2016 of \$38.70, excise tax payments will be due to all NEOs that are entitled to tax gross-up payments. The tax gross-up payments were calculated using the highest federal and state tax rates in effect during 2016.

Potential Payment upon Termination by Disability Table*

<u>Name</u>	<u>Base Salary (1)</u>	<u>Bonus (2)</u>	<u>Accrued Compensation (3)</u>	<u>Stock Awards (4)</u>	<u>Medical (5)</u>	<u>Total</u>
Kevin C. Gorman, Ph.D.	\$740,000	\$355,200	\$43,432	\$3,175,017	\$43,975	\$4,357,624
Timothy P. Coughlin	\$543,375	\$217,350	\$32,176	\$1,593,931	\$34,300	\$2,421,132
Christopher F. O'Brien, M.D.	\$487,000	\$243,500	\$ 2,828	\$1,123,683	\$25,367	\$1,882,378
Eric Benevich	\$376,000	\$188,000	\$ 6,515	\$ 112,086	\$35,091	\$ 717,692
Haig P. Bozigian, Ph.D.	\$395,000	\$197,500	\$41,141	\$ 987,607	\$35,162	\$1,656,410

* Reflects a termination due to disability.

- (1) Based on salary as of December 31, 2016.
(2) Based on bonus targets established by the Board of Directors for 2016.
(3) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2016 and a one-time additional two-week vacation benefit for eligible employees.
(4) The amounts in this column represent the intrinsic value of 'in-the money' unvested options and restricted stock units as of December 31, 2016 that would vest in accordance with the executive officers' employment agreements. Values were derived using the closing price of the Company's common stock on December 30, 2016 of \$38.70.

- (5) Medical is comprised primarily of health insurance premiums for the period specified in each executive officer's employment contract.

Potential Payment upon Termination by Death Table*

<u>Name</u>	<u>Bonus (1)</u>	<u>Accrued Compensation (2)</u>	<u>Stock Awards (3)</u>	<u>Total</u>
Kevin C. Gorman, Ph.D.	\$355,200	\$43,432	\$3,175,017	\$3,573,649
Timothy P. Coughlin	\$217,350	\$32,176	\$1,593,931	\$1,843,457
Christopher F. O'Brien, M.D.	\$243,500	\$ 2,828	\$1,123,683	\$1,370,011
Eric Benevich	\$188,000	\$ 6,515	\$ 112,086	\$ 306,601
Haig P. Bozigian, Ph.D.	\$197,500	\$41,141	\$ 987,607	\$1,226,248

* Reflects a termination due to death.

- (1) Based on bonus targets established by the Board of Directors for 2016.
- (2) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2016 and a one-time additional two-week vacation benefit for eligible employees.
- (3) The amounts in this column represent the intrinsic value of 'in-the money' unvested options and restricted stock units as of December 31, 2016 that would vest in accordance with the executive officers' employment agreements. Values were derived using the closing price of the Company's common stock on December 30, 2016 of \$38.70.

The following is a description of the arrangements under which the NEOs may be entitled to potential payments upon a termination without cause or resignation due to a constructive termination (including following a change-in-control) or upon disability or death. Resignation due to constructive termination may include an executive's resignation following one or more of the following material adverse changes in the nature of such executive's employment, as specified in the agreement, which is not cured following notification:

- a significant reduction in the executive or the executive supervisor's duties or responsibilities,
- a material reduction in base salary,
- material relocation, or
- material breach of the executive's employment agreement.

Dr. Gorman is entitled to 1.25 times the amount of his annual base salary and target annual bonus to be paid equally over 15 months, an acceleration of unvested shares that would have vested over the 15 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 15 months following termination in the event that the Company terminates his employment without cause, or he resigns due to a constructive termination. In the event of such termination within six months after the consummation of a change of control, Dr. Gorman is entitled to 2 times the amount of his annual base salary and annual target bonus to be paid in one lump sum, a cash amount equal to the value of all unvested stock awards and all vested and outstanding stock awards, and payment of COBRA benefits to continue then-current coverage for a period of 24 months following termination. In addition, the Company has agreed to reimburse Dr. Gorman for the increase in federal and state income taxes payable by him by reason of the benefits provided in connection with such a termination in connection with a change in control if the total payment exceeds 2.99 times his base amount by more than 15%. In the event of termination due to disability, Dr. Gorman is entitled to 15 months of base salary paid semi-monthly over 15 months, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Dr. Gorman in the fiscal year and the denominator of which is 12, an acceleration of unvested shares that would have vested over the 15 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 15 months following termination. In the event of a termination due to Dr. Gorman's death, his beneficiaries or estate, would be entitled to an acceleration of unvested shares that would have vested

over the 15 continuous months after the date of termination, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Dr. Gorman in the fiscal year and the denominator of which is 12 and any accrued and unpaid compensation on the date of termination.

Mr. Coughlin is entitled to 1.25 times the amount of his annual base salary and target annual bonus to be paid equally over 15 months, an acceleration of unvested shares that would have vested over the 15 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 15 months following termination in the event that the Company terminates his employment without cause, or he resigns due to a constructive termination. In the event of such termination within six months after the consummation of a change of control, Mr. Coughlin is entitled to 2 times his annual base salary and annual target bonus to be paid in one lump sum, a cash amount equal to the value of all unvested stock awards and all vested and outstanding stock awards, and payment of COBRA benefits to continue then-current coverage for a period of 24 months following termination. In addition, the Company has agreed to reimburse Mr. Coughlin for the increase in federal and state income taxes payable by him by reason of the benefits provided in connection with such a termination in connection with a change in control if the total payment exceeds 2.99 times his base amount by more than 15%. In the event of termination due to disability, Mr. Coughlin is entitled to 15 months of base salary paid semi-monthly over 15 months, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Mr. Coughlin in the fiscal year and the denominator of which is 12, an acceleration of unvested shares that would have vested over the 15 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 15 months following termination. In the event of a termination due to Mr. Coughlin's death, his beneficiaries or estate, would be entitled to an acceleration of unvested shares that would have vested over the 15 continuous months after the date of termination, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Mr. Coughlin in the fiscal year and the denominator of which is 12 and any accrued and unpaid compensation on the date of termination.

Dr. O'Brien is entitled to 1.0 times the amount of his annual base salary and target annual bonus to be paid equally over 12 months, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination in the event that the Company terminates his employment without cause, or he resigns due to a constructive termination. In the event of such termination within six months after the consummation of a change of control, Dr. O'Brien is entitled to 1.5 times the amount of his annual base salary and annual target bonus to be paid in one lump sum, a cash amount equal to the value of all unvested stock awards and all vested and outstanding stock awards, and payment of COBRA benefits to continue then-current coverage for a period of 18 months following termination. In addition, the Company has agreed to reimburse Dr. O'Brien for the increase in federal and state income taxes payable by him by reason of the benefits provided in connection with such a termination in connection with a change in control if the total payment exceeds 2.99 times his base amount by more than 15%. In the event of termination due to disability, Dr. O'Brien is entitled to 12 months of base salary paid semi-monthly over 12 months, a lump sum amount equal to his target annual bonus multiplied by a fraction of the numerator of which is the number of full months of employment by Dr. O'Brien in the fiscal year and the denominator of which is 12, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination. In the event of a termination due to Dr. O'Brien's death, his beneficiaries or estate, would be entitled to an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Dr. O'Brien in the fiscal year and the denominator of which is 12 and any accrued and unpaid compensation on the date of termination.

Mr. Benevich is entitled to 1.0 times the amount of his annual base salary and target annual bonus to be paid equally over 12 months, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination in the event that the Company terminates his employment without cause, or he resigns due to a constructive termination. In the event of such termination within six months after the consummation of a change of control, Mr. Benevich is entitled to 1.5 times the amount of his annual base salary and annual target bonus to be paid in one lump sum, a cash amount equal to the value of all unvested stock awards and all vested and outstanding stock awards, and payment of COBRA benefits to continue then-current coverage for a period of 18 months following termination; provided, however, in the event such payment to Mr. Benevich after a change of control is subject to a “best-after-tax” provision. The best-after-tax provision provides that if the change of control payment due to Mr. Benevich would be subject to the excise tax provisions of Section 280G of the Internal Revenue Code, the Company may reduce the change of control payments to Mr. Benevich if, after all applicable taxes, the final payments would be larger than if the change of control payments were not reduced and therefor subject to an excise tax. In the event of termination due to disability, Mr. Benevich is entitled to 12 months of base salary paid semi-monthly over 12 months, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Mr. Benevich in the fiscal year and the denominator of which is 12, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination. In the event of a termination due to Mr. Benevich’s death, his beneficiaries or estate, would be entitled to an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Mr. Benevich in the fiscal year and the denominator of which is 12 and any accrued and unpaid compensation on the date of termination.

Dr. Bozigian is entitled to 1.0 times the amount of his annual base salary and target annual bonus to be paid equally over 12 months, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination in the event that the Company terminates his employment without cause, or he resigns due to a constructive termination. In the event of such termination within six months after the consummation of a change of control, Dr. Bozigian is entitled to 1.5 times the amount of his annual base salary and annual target bonus to be paid in one lump sum, a cash amount equal to the value of all unvested stock awards and all vested and outstanding stock awards, and payment of COBRA benefits to continue then-current coverage for a period of 18 months following termination. In addition, the Company has agreed to reimburse Dr. Bozigian for the increase in federal and state income taxes payable by him by reason of the benefits provided in connection with such a termination in connection with a change in control if the total payment exceeds 2.99 times his base amount by more than 15%. In the event of termination due to disability, Dr. Bozigian is entitled to 12 months of base salary paid semi-monthly over 12 months, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Dr. Bozigian in the fiscal year and the denominator of which is 12, an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, and payment of COBRA benefits to continue then-current coverage for a period of 12 months following termination. In the event of a termination due to Dr. Bozigian’s death, his beneficiaries or estate, would be entitled to an acceleration of unvested shares that would have vested over the 12 continuous months after the date of termination, a lump sum amount equal to his target annual bonus multiplied by a fraction the numerator of which is the number of full months of employment by Dr. Bozigian in the fiscal year and the denominator of which is 12 and any accrued and unpaid compensation on the date of termination.

DIRECTORS COMPENSATION SUMMARY

Non-Employee Director Compensation Philosophy

Our non-employee director compensation philosophy is based on the following guiding principles:

- Aligning the long-term interests of stockholders and directors; and
- Compensating directors appropriately and adequately for their time, effort and experience.

The elements of director compensation consist of annual cash retainers and equity awards, as well as customary and usual expense reimbursement in attending Company meetings. In an effort to align the long-term interests of our stockholders and non-employee directors, the mix of cash and equity compensation has historically been, and is currently, weighted more heavily to equity.

In 2016, the Board and the Company's stockholders approved certain annual limits on compensation to be paid to the Company's non-employee directors. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a non-employee director will not exceed \$1,250,000 in total value during any year. In addition, the aggregate value of the initial option grant or other similar stock awards granted under the 2011 Plan or otherwise to any individual for service as a non-employee director upon or in connection with his or her initial election or appointment to the Board will not exceed \$2,000,000 in total value. The Board has the authority to make exceptions to these limits in extraordinary circumstances, in its discretion, provided that any non-employee director who is granted or paid such additional compensation may not participate in the decision to grant or pay such additional compensation. No exceptions were made in 2016.

Each year, our Committee reviews non-employee director compensation levels with its compensation consultant and recommends to our Board, as it deems appropriate, changes to such compensation levels. Our director compensation for fiscal 2016 and fiscal 2017 is described below.

Non-Employee Director Compensation for Fiscal 2016

Non-employee directors are reimbursed for expenses incurred in connection with performing their duties as directors of the Company. For 2016, directors who are not employees of the Company received a \$50,000 annual retainer. The Company provided the Chairman of the Board, William H. Rastetter, an additional \$30,000, making his total annual cash retainer \$80,000. In addition to the cash compensation set forth above, the Chairman of the Audit Committee received an additional \$20,000 annual cash retainer. The Chairman of the Compensation Committee received an additional \$20,000 annual cash retainer. The Chairman of the Nominating/Corporate Governance Committee received an additional \$9,000 annual cash retainer. The Chairman of the Technology and Medical Sciences Committee received an additional \$9,000 annual cash retainer. Each other director who was a member of the Audit Committee, the Compensation Committee, the Nominating/Corporate Governance Committee or the Science and Medical Technology Committee received an additional annual cash retainer of \$12,000, \$12,000, \$5,000 and \$5,000, respectively, for each Committee on which he or she served.

Additionally, for 2016, each non-employee director received a grant of a nonstatutory stock option to purchase 15,000 shares of the Company's common stock (except that the Chairman of the Board received an option to purchase 18,000 shares) at the 2016 Annual Meeting. The options granted to non-employee directors have exercise prices equal to the fair market value of the Company's common stock on the date of the grant, are subject to a ten-year term and vest monthly over the one-year period following the date of grant.

The following table sets forth the compensation paid by the Company for the fiscal year ended December 31, 2016 to the directors of the Company named below:

Director Compensation Table

<u>Name</u>	<u>Fees Earned or Paid in Cash (1)</u>	<u>Option Awards (2)</u>	<u>Total</u>
Kevin C. Gorman, Ph.D. (3)	\$ —	\$ —	\$ —
William H. Rastetter, Ph.D. (4)	\$86,750	\$482,040	\$568,790
Gary A. Lyons (5)	\$55,292	\$401,700	\$456,992
Joseph A. Mollica, Ph.D. (6)	\$67,000	\$401,700	\$468,700
George J. Morrow (7)	\$65,500	\$401,700	\$467,200
W. Thomas Mitchell (8)	\$ —	\$ —	\$ —
Corinne H. Nevinny (9)	\$70,000	\$401,700	\$471,700
Richard F. Pops (10)	\$82,000	\$401,700	\$483,700
Alfred W. Sandrock, Jr., M.D. Ph.D. (11)	\$68,958	\$401,700	\$470,658
Stephen A. Sherwin, M.D. (12)	\$73,625	\$401,700	\$475,325

- (1) Amounts in this column reflect compensation earned in 2016, all of which was paid during 2016.
- (2) The amounts shown represent the full grant date fair value of option awards granted in 2016 as determined pursuant to ASC 718. The assumptions used to calculate the value of such awards are set forth under Note 8 of the Notes to the Consolidated Financial Statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016. The grant date fair values of all option awards are based on a per share Black-Scholes value of \$26.78.
- (3) During 2016, Dr. Gorman was an employee of the Company, and as such, did not receive any compensation for service on the Board of Directors. As of December 31, 2016, Dr. Gorman had outstanding options to purchase 1,185,000 shares of common stock, and 137,500 outstanding restricted stock units.
- (4) As of December 31, 2016, Dr. Rastetter had outstanding options to purchase 153,000 shares of common stock.
- (5) As of December 31, 2016, Mr. Lyons had outstanding options to purchase 115,000 shares of common stock.
- (6) As of December 31, 2016, Dr. Mollica had outstanding options to purchase 120,000 shares of common stock.
- (7) As of December 31, 2016 Mr. Morrow had outstanding options to purchase 55,000 shares of common stock.
- (8) As of December 31, 2016, Mr. Mitchell had outstanding options to purchase 55,000 shares of common stock. Mr. Mitchell resigned from the Board of Directors on May 19, 2016.
- (9) As of December 31, 2016, Ms. Nevinny had outstanding options to purchase 115,000 shares of common stock.
- (10) As of December 31, 2016, Mr. Pops had outstanding options to purchase 115,000 shares of common stock.
- (11) As of December 31, 2016, Dr. Sandrock had outstanding options to acquire 55,000 shares of common stock.
- (12) As of December 31, 2016, Dr. Sherwin had outstanding options to purchase 115,000 shares of common stock.

Non-Employee Director Compensation for Fiscal 2017

Director cash and equity compensation for 2017 will remain at the 2016 levels. Any new non-employee director will be automatically granted a nonstatutory stock option to purchase 20,000 shares of the Company's common stock upon the date such person joins the Board of Directors.

Additional Information

Executive officers of the Company serve at the discretion of the Board of Directors. There are no family relationships among any of the directors, executive officers or key employees of the Company. None of our directors or executive officers has been involved in any of the legal proceedings specified in Item 401(f) of Regulation S-K in the past 10 years.

RELATED PERSON TRANSACTIONS

Review, Approval or Ratification of Related Person Transactions

In accordance with the Company's Audit Committee Charter, the Company's Audit Committee is responsible for reviewing and approving the terms and conditions of all related person transactions. In connection with its review, approval or ratification of related person transactions, the Company's Audit Committee takes into account all relevant available facts and circumstances in determining whether such transaction is in the best interests of the Company and its stockholders. Any transaction that would disqualify a director from meeting the "independent director" standard as defined under the Nasdaq Stock Market rules requires review by the Company's Audit Committee prior to entering into such transaction. For all other related person transactions the Company reviews all agreements and payments for related person transactions and based on this review, a report is made to the Company's Audit Committee quarterly disclosing all related person transactions during that quarter, if any. All related person transactions shall be disclosed in the Company's applicable filings with the SEC as required under SEC rules.

Related Person Transactions During Fiscal 2016

There were no related person transactions during fiscal 2016.

OTHER MATTERS

As of the date of this proxy statement, the Company knows of no other matters to be submitted to the stockholders at the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed proxy card to vote the shares they represent as the Board of Directors may recommend.

ADDITIONAL INFORMATION

"Householding" of Proxy Materials. The SEC has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially provides extra convenience for stockholders and cost savings for companies. The Company, as well as certain brokers, household proxy materials, unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker

or us that they or we will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement, please notify your broker if your shares are held in a brokerage account or us if you hold registered shares. If you hold registered shares, you may direct your written request to the Company's Corporate Secretary at 12780 El Camino Real, San Diego, California 92130 or contact the Company's Corporate Secretary at 858-617-7600.

Advance Notice Procedures. To be considered for inclusion in next year's proxy materials, a stockholder must submit his, her or its proposal in writing by December 21, 2017, which is the date that is 120 days prior to the first anniversary of the mailing date of this proxy statement, to the Company's Corporate Secretary at 12780 El Camino Real, San Diego, California 92130. Any proposal must comply with the requirements as to form and substance established by the SEC for such proposal to be included in our proxy statement. Stockholders are also advised to review our bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

[THIS PAGE INTENTIONALLY LEFT BLANK]

NEUROCRINE BIOSCIENCES, INC.

2011 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 21, 2011

APPROVED BY THE STOCKHOLDERS: MAY 25, 2011

AMENDED BY THE STOCKHOLDERS: MAY 23, 2013

AMENDED BY THE STOCKHOLDERS: MAY 22, 2014

AMENDED BY THE STOCKHOLDERS: MAY 28, 2015

AMENDED BY THE STOCKHOLDERS: MAY 20, 2016

AMENDED BY THE STOCKHOLDERS: , 2017

TERMINATION DATE: FEBRUARY 20, 2021

1. GENERAL.

(a) **Successor to and Continuation of Prior Plans.** The Plan is intended as the successor to and continuation of the Neurocrine Biosciences, Inc. 2003 Incentive Stock Plan, 2001 Stock Option Plan, 1997 Incentive Stock Plan, 1996 Director Stock Option Plan and 1992 Incentive Stock Plan (together the “*Prior Plans*”). On the Effective Date, awards will automatically be granted to the Company’s Directors pursuant to the terms of Section 10 of the Neurocrine Biosciences, Inc. 2003 Incentive Stock Plan (the “*2011 Automatic Director Awards*”). From and following the Effective Date, no additional stock awards shall be granted under the Prior Plans except for the 2011 Automatic Director Awards. From and after the Effective Date, all outstanding stock awards granted under the Prior Plans shall remain subject to the terms of the Prior Plans; provided, however, any shares subject to outstanding stock awards granted under the Prior Plans that expire or terminate for any reason prior to exercise or settlement or are otherwise forfeited prior to issuance of the shares because of the failure to meet a contingency or condition required to vest such shares shall not again become available for issuance under either the Prior Plans or this Plan. Except with respect to the 2011 Automatic Director Awards, all Awards granted on or after the Effective Date of this Plan shall be subject to the terms of this Plan.

(b) **Eligible Award Recipients.** The persons eligible to receive discretionary Awards are Employees, Directors and Consultants. The persons eligible to receive Stock Awards under the Director Grant Program are Eligible Directors.

(c) **Available Awards.** The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards, (vi) Performance Stock Awards, and (vii) Other Stock Awards.

(d) **Purpose.** The Company, by means of the Plan, seeks to secure and retain the services of the group of persons eligible to receive Awards as set forth in Section 1(b), to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

2. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(d). However, the Board may not delegate administration of the Director Grant Program.

(b) Powers of Board. Except with respect to the Director Grant Program, the Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (A) which of the persons eligible under the Plan shall be granted Awards; (B) when and how each Award shall be granted; (C) what type or combination of types of Award shall be granted; (D) the provisions of each Award granted (which need not be identical), including the time or times when a person shall be permitted to receive cash or Common Stock pursuant to an Award; (E) the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement in a manner and to the extent it shall deem necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Award stating the time at which it may first be exercised or the time during which it will vest.

(v) To suspend or terminate the Plan at any time. Suspension or termination of the Plan shall not impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vi) To amend the Plan in any respect the Board deems necessary or advisable. However, except as provided in Section 10(a) relating to Capitalization Adjustments, to the extent required by applicable law or listing requirements, stockholder approval shall be required for any amendment of the Plan that either (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (D) materially extends the term of the Plan, or (E) expands the types of Awards available for issuance under the Plan. Except as provided above, rights under any Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of (A) Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees, (B) Section 422 of the Code regarding incentive stock options or (C) Rule 16b-3.

(viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; provided however, that except with respect to amendments that disqualify or impair the status of an Incentive Stock Option, a Participant's rights under any Award shall not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent if necessary to maintain the qualified status of the Award as an Incentive Stock Option or to bring the Award into compliance with Section 409A of the Code.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States.

(c) Administration of Director Grant Program. The Board shall have the power, subject to and within the limitations of, the express provisions of the Director Grant Program:

(i) To determine the provisions of each Stock Award to the extent not specified in the Director Grant Program.

(ii) To construe and interpret the Director Grant Program and the Stock Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Director Grant Program or in any Stock Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Director Grant Program fully effective.

(iii) To amend the terms of the Director Grant Program or a Stock Award granted thereunder, except that rights under any such Stock Award granted before amendment of the Director Grant Program shall not be impaired by any amendment of the Director Grant Program unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(iv) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Director Grant Program.

(d) Delegation to Committee.

(i) **General.** The Board may delegate some or all of the administration of the Plan (except the Director Grant Program) to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Committee may, at any time, abolish the subcommittee and/or revest in the Committee any powers delegated to the subcommittee. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(ii) **Section 162(m) and Rule 16b-3 Compliance.** The Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3.

(e) **Delegation to an Officer.** The Board may delegate to one (1) or more Officers the authority to do one or both of the following (i) designate Employees who are providing Continuous Service to the Company or any of its Subsidiaries who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; provided, however, that the Board resolutions regarding such delegation shall specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Notwithstanding the foregoing, the Board may not delegate authority to an Officer to determine the Fair Market Value pursuant to Section 14(z)(iii) below.

(f) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

(g) Cancellation and Re-Grant of Stock Awards. Except in connection with a Corporate Transaction, as provided in Section 10(a) relating to Capitalization Adjustments, or unless the stockholders of the Company have approved such an action within twelve (12) months prior to such an event, neither the Board nor any Committee shall have the authority to: (i) reduce the exercise price of any outstanding Options or SARs under the Plan, or (ii) cancel any outstanding Options or SARs that have an exercise price or strike price greater than the current Fair Market Value of the Common Stock in exchange for cash, Full Value Awards, or Options or SARs with an exercise price less than the original exercise price of the Options or SARs that are cancelled.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to Section 10(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date shall not exceed seventeen million (17,000,000) shares. For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of the Common Stock that may be issued pursuant to the Plan and does not limit the granting of Stock Awards except as provided in Section 8(a). Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance shall not reduce the number of shares available for issuance under the Plan. Furthermore, if a Stock Award or any portion thereof expires or otherwise terminates without all of the shares covered by such Stock Award having been issued, such expiration or termination shall not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan.

(b) Reversion of Shares to the Share Reserve. If any shares of common stock issued pursuant to a Stock Award are forfeited back to the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited shall revert to and again become available for issuance under the Plan.

(c) Limitation on Full Value Awards. The aggregate number of shares of Common Stock that may be issued pursuant to grants of Full Value Awards shall not exceed fifty percent (50%) of the aggregate number of shares of Common Stock available for issuance under this Plan as set forth in Section 3(a), subject to adjustment as provided in Sections 3(b) and 10(a).

(d) Shares Not Available For Subsequent Issuance. If any shares subject to a Stock Award are not delivered to a Participant because the Stock Award is exercised through a reduction of shares subject to the Stock Award (i.e., “*net exercised*”), the number of shares that are not delivered to the Participant shall no longer be available for issuance under the Plan. Also, any shares used to pay the exercise price of a Stock Award or that are withheld in satisfaction of applicable tax withholding obligations shall no longer be available for issuance under the Plan. Any shares repurchased on the open market with the proceeds of the exercise price of a Stock Award shall not again be available for issuance under the Plan.

(e) Incentive Stock Option Limit. Notwithstanding anything to the contrary in this Section 3 and, subject to the provisions of Section 10(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options shall be seventeen million (17,000,000) shares of Common Stock.

(f) Section 162(m) Limitation on Annual Grants. Subject to the provisions of Section 10(a) relating to Capitalization Adjustments, at such time as the Company may be subject to the applicable provisions of Section 162(m) of the Code, a maximum of five hundred thousand (500,000) shares of Common Stock subject to Options, SARs and Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least one hundred percent (100%) of the Fair Market Value on the date any such Stock Award is granted may be granted to any Participant during any calendar year; provided, however that in connection with his or her initial employment, an Employee may be granted such forms of Stock Awards for up to an additional five hundred thousand (500,000) shares of Common Stock which shall not count against such annual limit.

Notwithstanding the foregoing, if any additional Options, SARs or Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least one hundred percent (100%) of the Fair Market Value on the date the Stock Award are granted to any Participant during any calendar year, compensation attributable to the exercise of such additional Stock Awards shall not satisfy the requirements to be considered “qualified performance-based compensation” under Section 162(m) of the Code unless such additional Stock Awards are approved by the Company’s stockholders.

(g) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any period commencing on the date of the Company’s regular Annual Meeting for a particular year and ending on the date of the Company’s regular Annual Meeting for the next subsequent year (the “*Annual Period*”), including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed one million two hundred fifty thousand dollars (\$1,250,000) in total value. In addition, the aggregate value of the Initial Award(s) (or other similar stock award(s) granted under the Plan or otherwise to any individual for service as a Non-Employee Director upon or in connection with his or her initial election or appointment to the Board) will not exceed two million dollars (\$2,000,000) in total value; for the avoidance of doubt, the aggregate compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to an Annual Period in which such individual is first appointed or elected to the Board shall not exceed the sum of the two preceding limitations in this Section 3(g). The value of any stock awards, for purposes of the limitations described in this Section 3(g), shall be calculated based on the grant date fair value of such stock awards for financial reporting purposes. The limitations in this Section 3(g) shall apply beginning with the Annual period in which the Company’s 2016 Annual Meeting occurs. The Board may make an exception to the applicable limit in this Section 3(g) for any Non-Employee Director in extraordinary circumstances, as the Board may determine in its discretion, provided that any Non-Employee Director who is granted or paid such additional compensation may not participate in the decision to grant or pay such additional compensation.

(h) Source of Shares. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise; provided, however that the Company may not repurchase shares to be used under this Plan to the extent such repurchased shares would exceed the limitation in Section 3(a).

4. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and (f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; provided, however, Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any “parent” of the Company, as such term is defined in Rule 405 promulgated under the Securities Act, unless the stock underlying such Stock Awards is treated as “service recipient stock” under Section 409A of the Code because the Stock Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Stock Awards comply with the distribution requirements of Section 409A of the Code. Stock Awards granted under the Director Grant Program in Section 7 may be granted only to Eligible Directors.

(b) Ten Percent Stockholders. A Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for

shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, then the Option shall be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; provided, however, that each Option Agreement or SAR Agreement shall conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR shall be exercisable after the expiration of ten (10) years from the date of its grant or such shorter period specified in the Award Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise price (or strike price) of each Option or SAR shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Option or SAR is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise price (or strike price) lower than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option or SAR if such Option or SAR is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option shall be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board shall have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) if the option is a Nonstatutory Stock Option, by a “*net exercise*” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; provided, however, that the Company shall accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; provided, further, that shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are reduced to pay the exercise price pursuant to the “*net exercise*,” (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or

(v) in any other form of legal consideration that may be acceptable to the Board.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the SAR Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the strike

price that will be determined by the Board at the time of grant of the SAR. The appreciation distribution in respect to a SAR may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the SAR Agreement evidencing such SAR.

(e) Transferability of Options and SARs. The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board shall determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs shall apply:

(i) Restrictions on Transfer. An Option or SAR shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Participant only by the Participant. Except as explicitly provided herein, neither an Option nor a SAR may be transferred.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, an Option or SAR may be transferred pursuant to a domestic relations order; provided, however, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Notwithstanding the foregoing, the Participant may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company and any broker designated by the Company to effect Option exercises, designate a third party who, in the event of the death of the Participant, shall thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Participant's estate shall be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause or upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Award as of the date of termination of Continuous Service) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Award Agreement), or (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the time specified herein or in the Award Agreement (as applicable), the Option or SAR shall terminate.

(h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause or upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR shall terminate on the earlier of (i) the expiration of a total period of three (3) months (that need not be consecutive) after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the immediate sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then

the Option or SAR shall terminate on the earlier of (i) the expiration of a period equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination of Continuous Service (or such longer or shorter period specified in the Award Agreement), or (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the time specified herein or in the Award Agreement (as applicable), the Option or SAR (as applicable) shall terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Award Agreement for exercisability after the termination of the Participant's Continuous Service (for a reason other than death), then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date eighteen (18) months following the date of death (or such longer or shorter period specified in the Award Agreement), or (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the time specified herein or in the Award Agreement (as applicable), the Option or SAR shall terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR shall terminate immediately upon such Participant's termination of Continuous Service, and the Participant shall be prohibited from exercising his or her Option or SAR from and after the time of such termination of Continuous Service.

(l) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR. Notwithstanding the foregoing, consistent with the provisions of the Worker Economic Opportunity Act, (i) in the event of the Participant's death or Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Award Agreement or in another applicable agreement or in accordance with the Company's then current employment policies and guidelines), any such vested Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARs.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or

(ii) evidenced by a certificate, which certificate shall be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical; provided, however, that each Restricted Stock Award Agreement shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board shall determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical; provided, however, that each Restricted Stock Unit Award Agreement shall conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award will be settled by the delivery of shares of Common Stock as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such

manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate, including any vesting restrictions.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(c) Performance Awards.

(i) Performance Stock Awards. A Performance Stock Award is a Stock Award that may vest or may be exercised contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Committee, in its sole discretion. The maximum number of shares covered by an Award that may be granted to any Participant in a calendar year attributable to Stock Awards described in this Section 6(c)(i) (whether the grant, vesting or exercise is contingent upon the attainment during a Performance Period of the Performance Goals) shall not exceed five hundred thousand (500,000) shares of Common Stock; provided, however that in connection with his or her initial employment, an Employee may be granted Performance Stock Awards for up to an additional five hundred thousand (500,000) shares of Common Stock which shall not count against such annual limit. The Board may provide for or, subject to such terms and conditions as the Board may specify, may permit a Participant to elect for, the payment of any Performance Stock Award to be deferred to a specified date or event. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Stock Awards.

Dividend equivalents may be credited in respect of shares of Common Stock covered by a Performance Stock Award, as determined by the Board and contained in the Performance Stock Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Performance Stock Award in such manner as determined by the Board. Any additional shares covered by the Performance Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Performance Stock Award Agreement to which they relate, including any vesting contingent upon the attainment during a Performance Period of certain Performance Goals.

(ii) Board Discretion. The Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for a Performance Period.

(iii) Section 162(m) Compliance. Unless otherwise permitted in compliance with the requirements of Section 162(m) of the Code with respect to an Award intended to qualify as "performance-based compensation" thereunder, the Committee shall establish the Performance Goals applicable to, and the formula for calculating the amount payable under, the Award no later than the earlier of (a) the date ninety (90) days after the commencement of the applicable Performance Period, or (b) the date on which twenty-five percent (25%) of the Performance Period has elapsed, and in either event at a time when the achievement of the applicable Performance Goals remains substantially uncertain. Prior to the payment of any compensation under an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Committee shall certify the extent to which any Performance Goals and any other material terms under such Award have been satisfied (other than in cases where such relate solely to the increase in the value of the Common Stock). Notwithstanding satisfaction of any completion of any Performance Goals, to the extent specified at the time of grant of an Award to "covered employees" within the meaning of Section 162(m) of the Code, the number of shares of Common Stock, Options, or other benefits granted, issued, retainable and/or vested under an Award on account of satisfaction of such

Performance Goals may be reduced by the Committee on the basis of such further considerations as the Committee, in its sole discretion, shall determine.

(d) Other Stock Awards. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board shall have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. INITIAL AND ANNUAL GRANTS TO ELIGIBLE DIRECTORS.

(a) General. The Director Grant Program in this Section 7 provides that Eligible Directors shall receive certain Stock Awards at designated intervals over their period of Continuous Service on the Board. For the avoidance of doubt, all Stock Awards granted the Plan, including any Stock Awards granted under this Section 7, are subject to all the terms and conditions of the Plan, including but not limited to the share reserve limitations of Section 3 and the cancellation and regrant restrictions set forth in Section 2(g).

(b) Eligibility. Stock Awards shall be granted under this Section 7 to all Eligible Directors who meet the criteria specified below.

(c) Director Grants.

(i) Initial Award. At the time a person is first elected or appointed to serve on the Board, provided such person is an Eligible Director, he or she automatically shall, upon the date of his or her initial election or appointment as an Eligible Director, be granted an Option to purchase a number of shares of Common Stock as determined by the Board in its sole discretion, on the terms and conditions set forth in Section 7(d) (each such Option is an “*Initial Award*”).

(ii) Annual Awards. On the date of each Annual Meeting, commencing with the Annual Meeting in 2012, each person who is then a Eligible Director and who has served as an Eligible Director on the Board for a period of at least six (6) months shall be granted an Option to purchase a number of shares of Common Stock as determined by the Board, in its sole discretion on the terms and conditions set forth in Section 7(d) (each such Option is an “*Annual Award*”).

(d) Director Option Grant Provisions.

(i) Option Type. Each Option automatically granted under this Section 7 shall be a Nonstatutory Stock Option.

(ii) Term. No Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(iii) Exercise Price. The exercise price of each Option shall be one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted.

(iv) Vesting.

(1) Initial Awards granted pursuant to this Section 7 shall vest monthly with respect to 1/36th of the shares over the three (3) year period following the date of grant, subject to the Eligible Director’s Continuous Service through the applicable vesting dates, so that the Option will be fully vested on the third anniversary of the date of grant.

(2) Annual Awards granted pursuant to this Section 7 shall vest monthly with respect to 1/12th of the shares over the one (1) year period following the date of grant, subject to the Eligible Director’s Continuous Service through the applicable vesting dates, so that the Option will be fully vested on the first anniversary of the date of grant.

(3) Each Option granted pursuant to this Section shall automatically fully accelerate vesting upon a Corporate Transaction, subject to the Eligible Director's Continuous Service through the date of the Corporate Transaction.

(v) **Remaining Terms.** The remaining terms and conditions of each Option shall be as set forth in an Option Agreement in the form adopted from time to time by the Board; provided, however, that the terms of such Option Agreement shall be consistent with the terms of the Plan.

8. COVENANTS OF THE COMPANY.

(a) **Availability of Shares.** During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock reasonably required to satisfy such Stock Awards.

(b) **Securities Law Compliance.** The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; provided, however, that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant shall not be eligible for the grant of a Stock Award or the subsequent issuance of Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) **No Obligation to Notify or Minimize Taxes.** The Company shall have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company shall have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

9. MISCELLANEOUS.

(a) **Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

(b) **Corporate Action Constituting Grant of Stock Awards.** Corporate action constituting a grant by the Company of a Stock Award to any Participant shall be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant.

(c) **Stockholder Rights.** No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of the Stock Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Stock Award has been entered into the books and records of the Company.

(d) **No Employment or Other Service Rights.** Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant

to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds one hundred thousand dollars (\$100,000), the Options or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(f) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(g) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award Agreement.

(h) Electronic Delivery. Any reference herein to a "written" agreement or document shall include any agreement or document delivered electronically or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(i) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(j) Compliance with Section 409A. To the extent that the Board determines that any Award granted hereunder is subject to Section 409A of the Code, the Award Agreement evidencing such Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Award Agreements shall be interpreted in accordance with Section 409A of the Code. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded and a Participant holding an Award that constitutes “*deferred compensation*” under Section 409A of the Code is a “*specified employee*” for purposes of Section 409A of the Code, no distribution or payment of any amount shall be made upon a “*separation from service*” before a date that is six (6) months following the date of such Participant’s “*separation from service*” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant’s death.

(k) Minimum Vesting. After the Effective Date of the Plan, generally (i) no Full Value Award that vests on the basis of the Participant’s Continuous Service with the Company shall vest at a rate that is any more rapid than ratably over a three (3)-year period and (ii) no Full Value Award that vests based on the satisfaction of Performance Goals shall provide for a Performance Period of less than twelve (12) months. Notwithstanding the foregoing, Full Value Awards may be granted by the Committee after the Effective Date that do not meet the foregoing minimum vesting guidelines, provided that such Awards shall be limited to no more than 5% of the total number of shares reserved for issuance under the Plan.

10. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(e), (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Sections 3(f) and 6(c)(i), and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company’s right of repurchase) shall terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company’s repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, provided, however, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions shall apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award.

(i) Stock Awards May Be Assumed. In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation’s parent company) may assume or continue any or all Stock Awards outstanding under the Plan or may substitute similar stock awards for Stock Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to

Stock Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of a Stock Award or substitute a similar stock award for only a portion of a Stock Award, or may choose to assume or continue the Stock Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution shall be set by the Board.

(ii) Stock Awards Held by Current Employee and Director Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by Participants that are Employees or Directors and whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the “*Current Employee and Director Participants*”), the vesting of such Stock Awards (and, with respect to Options and SARs, the time when such Stock Awards may be exercised) shall be accelerated in full to a date prior to the effective time of such Corporate Transaction (contingent upon the effectiveness of the Corporate Transaction) as the Board shall determine (or, if the Board shall not determine such a date, to the date that is fifteen (15) days prior to the effective time of the Corporate Transaction), and such Stock Awards shall terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall lapse (contingent upon the effectiveness of the Corporate Transaction).

(d) Stock Awards Held by Persons other than Current Employee and Director Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by persons other than Current Employee and Director Participants, such Stock Awards shall terminate if not exercised (if applicable) prior to the effective time of the Corporate Transaction; provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(e) Payment for Stock Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event a Stock Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Stock Award may not exercise such Stock Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award (including, at the discretion of the Board, any unvested portion of such Stock Award), over (B) any exercise price payable by such holder in connection with such exercise.

(f) Change in Control. A Stock Award may be subject to acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration shall occur.

11. TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan shall automatically terminate on the day before the tenth (10th) anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan shall not impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

12. EFFECTIVE DATE OF PLAN. THIS PLAN SHALL BECOME EFFECTIVE ON THE EFFECTIVE DATE.

13. CHOICE OF LAW. THE LAWS OF THE STATE OF CALIFORNIA SHALL GOVERN ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS PLAN, WITHOUT REGARD TO THAT STATE'S CONFLICT OF LAWS RULES.

14. DEFINITIONS. AS USED IN THE PLAN, THE FOLLOWING DEFINITIONS SHALL APPLY TO THE CAPITALIZED TERMS INDICATED BELOW:

(a) "*Affiliate*" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board shall have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(b) "*Annual Meeting*" means the first meeting of the Company's stockholders held each calendar year at which Directors of the Company are selected.

(c) "*Award*" means a Stock Award.

(d) "*Award Agreement*" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.

(e) "*Board*" means the Board of Directors of the Company.

(f) "*Capitalization Adjustment*" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards No. 123 (revised). Notwithstanding the foregoing, the conversion of any convertible securities of the Company shall not be treated as a Capitalization Adjustment.

(g) "*Cause*" shall mean, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's commission of any crime involving fraud, dishonesty or moral turpitude; (ii) such Participant's attempted commission of or participation in a fraud or act of dishonesty against the Company that results in (or might have reasonably resulted in) material harm to the business of the Company; (iii) such Participant's intentional, material violation of any contract or agreement between Participant and the Company or any statutory duty Participant owes to the Company; or (iv) such Participant's conduct that constitutes gross insubordination, incompetence or habitual neglect of duties and that results in (or might have reasonably resulted in) material harm to the business of the Company; provided, however, that the action or conduct described in clauses (iii) and (iv) above will constitute "*Cause*" only if such action or conduct continues after the Company has provided such Participant with written notice thereof and not less than five business days to cure the same.

(h) "*Change in Control*" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the

Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the "**Subject Person**") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than fifty percent (50%) of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than fifty percent (50%) of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur, except for a liquidation into a parent corporation;

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than fifty percent (50%) of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(v) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "**Incumbent Board**") cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company.

(i) "**Code**" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(j) "**Committee**" means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(d).

(k) "**Common Stock**" means the common stock of the Company.

(l) "**Company**" means Neurocrine Biosciences, Inc., a Delaware corporation.

(m) “*Consultant*” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, shall not cause a Director to be considered a “*Consultant*” for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company’s securities to such person.

(n) “*Continuous Service*” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, shall not terminate a Participant’s Continuous Service; provided, however, if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, in its sole discretion, such Participant’s Continuous Service shall be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of (i) any leave of absence approved by the Board or Chief Executive Officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence shall be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(o) “*Corporate Transaction*” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least ninety percent (90%) of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(p) “*Covered Employee*” shall have the meaning provided in Section 162(m)(3) of the Code.

(q) “*Director*” means a member of the Board.

(r) “*Director Grant Program*” means the grant program in effect under Section 7 of the Plan.

(s) “*Disability*” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than twelve (12) months, as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code, and shall be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(t) “**Effective Date**” means the effective date of this Plan document, which is the date of the annual meeting of stockholders of the Company held in 2011 provided this Plan is approved by the Company’s stockholders at such meeting.

(u) “**Eligible Director**” means a Director who is not an Employee and is eligible to participate in the Director Grant Program.

(v) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, shall not cause a Director to be considered an “**Employee**” for purposes of the Plan.

(w) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(x) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(y) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “**Exchange Act Person**” shall not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company’s then outstanding securities.

(z) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(aa) “**Full Value Award**” generally means any Award granted under the Plan, but does not include any Option or a SAR granted pursuant to Section 5 of the Plan.

(bb) “**Incentive Stock Option**” means an option granted pursuant to Section 5 of the Plan that is intended to be, and qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(cc) “**Non-Employee Director**” means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act (“**Regulation S-K**”)), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which

disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a “non-employee director” for purposes of Rule 16b-3.

(dd) “*Nonstatutory Stock Option*” means any option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(ee) “*Officer*” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(ff) “*Option*” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(gg) “*Option Agreement*” means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(hh) “*Optionholder*” means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(ii) “*Other Stock Award*” means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(d).

(jj) “*Other Stock Award Agreement*” means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(kk) “*Outside Director*” means a Director who either (i) is not a current employee of the Company or an “affiliated corporation” (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an “affiliated corporation” who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an “affiliated corporation,” and does not receive remuneration from the Company or an “affiliated corporation,” either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an “outside director” for purposes of Section 162(m) of the Code.

(ll) “*Own,*” “*Owned,*” “*Owner,*” “*Ownership*” A person or Entity shall be deemed to “*Own,*” to have “*Owned,*” to be the “*Owner*” of, or to have acquired “*Ownership*” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(mm) “*Participant*” means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(nn) “*Performance Criteria*” means the one or more criteria that the Board shall select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that shall be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings, in either case before or after any or all of: interest, taxes, depreciation and amortization, legal settlements or other income (expense), or stock-based compensation, other non-cash expenses and changes in deferred revenue); (ii) total stockholder return; (iii) return on equity or average stockholder’s equity; (iv) return on assets, investment, or capital employed; (v) stock price; (vi) margin (including gross margin); (vii) income (before or after taxes); (viii) operating income; (ix) operating income after taxes; (x) pre-tax profit; (xi) operating cash flow; (xii) sales or revenue targets; (xiii) increases in revenue or product revenue; (xiv) expenses and cost reduction goals; (xv) improvement in or attainment of

working capital levels; (xvi) economic value added (or an equivalent metric); (xvii) market share; (xviii) cash flow; (xix) cash flow per share; (xx) cash burn; (xxi) share price performance; (xxii) debt reduction; (xxiii) implementation or completion of projects or processes (including, without limitation, discovery of a pre-clinical drug candidate, recommendation of a drug candidate to enter a clinical trial, clinical trial initiation, clinical trial enrollment and dates, clinical trial results, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, presentation of studies and launch of commercial plans, compliance programs or education campaigns); (xxiv) customer satisfaction; (xxv) stockholders' equity; (xxvi) capital expenditures; (xxvii) debt levels; (xxviii) financings; (xxix) operating profit or net operating profit; (xxx) workforce diversity; (xxxi) growth of net income or operating income; (xxxii) billings; (xxxiii) employee hiring; (xxxiv) funds from operations; (xxxv) budget management; (xxxvi) strategic partnerships or transactions (including acquisitions, joint ventures or licensing transactions); (xxxvii) engagement of thought leaders and patient advocacy groups; (xxxviii) enhancement of intellectual property portfolio, filing of patent applications and granting of patents; (xxxix) litigation preparation and management; and (xl) to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board.

(oo) “Performance Goals” means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board shall appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated Performance Goals; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the U.S. Food and Drug Administration or any other regulatory body.

(pp) “Performance Period” means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant’s right to and the payment of a Stock Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(qq) “Performance Stock Award” means a Stock Award granted under the terms and conditions of Section 6(c)(i).

(rr) “Plan” means this Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan.

(ss) “**Restricted Stock Award**” means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(tt) “**Restricted Stock Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(uu) “**Restricted Stock Unit Award**” means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(vv) “**Restricted Stock Unit Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement shall be subject to the terms and conditions of the Plan.

(ww) “**Rule 16b-3**” means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(xx) “**Securities Act**” means the Securities Act of 1933, as amended.

(yy) “**Stock Appreciation Right**” or “**SAR**” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.

(zz) “**Stock Appreciation Right Agreement**” or “**SAR Agreement**” means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement shall be subject to the terms and conditions of the Plan.

(aaa) “**Stock Award**” means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a SAR, a Performance Stock Award or any Other Stock Award.

(bbb) “**Stock Award Agreement**” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(ccc) “**Subsidiary**” means, with respect to the Company, (i) any corporation of which more than fifty percent (50%) of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than fifty percent (50%).

(ddd) “**Ten Percent Stockholder**” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Affiliate.

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

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

OR

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

For the transition period from _____ to _____

Commission file number: 0-22705

NEUROCRINE BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)
12780 El Camino Real, San Diego, CA
(Address of principal executive offices)

33-0525145
(I.R.S. Employer
Identification Number)
92130
(Zip Code)

Registrant's telephone number, including area code:
(858) 617-7600

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.001 par value	The NASDAQ Stock Market

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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.

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

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

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

The aggregate market value of the common equity held by non-affiliates of the registrant as of June 30, 2016 totaled approximately \$2,868,066,028 based on the closing price for the registrant's Common Stock on that day as reported by the NASDAQ Stock Market. Such value excludes Common Stock held by executive officers, directors and 10% or greater stockholders as of June 30, 2016. The identification of 10% or greater stockholders as of June 30, 2016 is based on applicable Schedule 13G and amended Schedule 13G reports. This calculation does not reflect a determination that such parties are affiliates as of other purposes.

As of February 1, 2017, there were 87,114,340 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Document Description

10-K Part

Portions of the registrant's notice of annual meeting of stockholders and proxy statement to be filed pursuant to Regulation 14A within 120 days after registrant's fiscal year end of December 31, 2016 are incorporated by reference into Part III of this report . . .

III

TABLE OF CONTENTS

	<u>Page</u>
PART I	
Item 1. Business	3
Item 1A. Risk Factors	28
Item 1B. Unresolved Staff Comments	45
Item 2. Properties	45
Item 3. Legal Proceedings	45
Item 4. Mine Safety Disclosures	45
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	46
Item 6. Selected Financial Data	48
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	49
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	61
Item 8. Financial Statements and Supplementary Data	62
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	88
Item 9A. Controls and Procedures	88
Item 9B. Other Information	91
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	92
Item 11. Executive Compensation	92
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	92
Item 13. Certain Relationships and Related Transactions, and Director Independence	92
Item 14. Principal Accounting Fees and Services	92
PART IV	
Item 15. Exhibits, Financial Statement Schedules	93

PART I

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K and the information incorporated herein by reference contain forward-looking statements that involve a number of risks and uncertainties. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, these forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as “believes,” “expects,” “hopes,” “may,” “will,” “plan,” “intends,” “estimates,” “could,” “should,” “would,” “continue,” “seeks,” “pro forma,” or “anticipates,” or other similar words (including their use in the negative), or by discussions of future matters such as the development of new products, technology enhancements, possible changes in legislation and other statements that are not historical. These statements include but are not limited to statements under the captions “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” as well as other sections in this report. You should be aware that the occurrence of any of the events discussed under the heading “Item 1A. Risk Factors” and elsewhere in this report could substantially harm our business, results of operations and financial condition and that if any of these events occurs, the trading price of our common stock could decline and you could lose all or a part of the value of your shares of our common stock.

The cautionary statements made in this report are intended to be applicable to all related forward-looking statements wherever they may appear in this report. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. Except as required by law, we assume no obligation to update our forward-looking statements, even if new information becomes available in the future.

ITEM 1. BUSINESS

Overview

We were originally incorporated in California in January 1992 and were reincorporated in Delaware in May 1996.

We discover and develop innovative and life-changing pharmaceuticals, in diseases with high unmet medical needs, through our novel R&D platform, focused on neurological and endocrine based diseases and disorders. Our three lead late-stage clinical programs are INGREZZA™ (valbenazine), a vesicular monoamine transporter 2 (VMAT2) inhibitor for the treatment of movement disorders, elagolix, a gonadotropin-releasing hormone (GnRH) antagonist for women’s health that is partnered with AbbVie Inc. (AbbVie), and opicapone, a highly-selective catechol-O-methyltransferase inhibitor (COMT inhibitor) that is an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors for adult patients with Parkinson’s disease and was inlicensed from BIAL – Portela & CA, S.A. (BIAL). We intend to commercialize INGREZZA in the United States subject to U.S. Food and Drug Administration (FDA) approval of our pending New Drug Application (NDA) that is under review for tardive dyskinesia (TD).

We are pursuing TD as our lead indication for INGREZZA. In August 2016, we submitted an NDA to the FDA, which was accepted for priority review by the FDA with a Prescription Drug User Fee Act (PDUFA) target action date of April 11, 2017. If approved, we intend to commercialize INGREZZA for TD in the United States by establishing a specialty sales force focused primarily on physicians who treat TD patients, including psychiatrists and neurologists.

We believe that INGREZZA has the potential to address important unmet medical needs in neurological and psychiatric disorders beyond TD and we plan to continue to study the use of INGREZZA in other disease states. We are currently investigating the utilization of INGREZZA in Tourette syndrome. We have completed two

clinical trials in Tourette’s patients and a third study is currently ongoing. We intend to utilize the results of these three studies to discuss with the FDA a plan for a pivotal Phase III program for INGREZZA in Tourette syndrome patients.

Our partner AbbVie has successfully completed the placebo-controlled portion of two Phase III studies of elagolix in women with endometriosis. Based on the positive results of these studies, AbbVie intends to submit an NDA to the FDA for elagolix to treat women with endometriosis during the third quarter of 2017. In addition, AbbVie is also assessing elagolix in women with uterine fibroids. The Phase III program began in early 2016 with two replicate studies of women with heavy uterine bleeding associated with uterine fibroids. AbbVie expects initial top-line efficacy data from the Phase III uterine fibroids program to be available in late 2017.

On February 9, 2017, we entered into an exclusive licensing agreement with BIAL for the development and commercialization of opicapone in the United States and Canada. Opicapone is a once-daily, peripherally-acting, highly-selective COMT inhibitor that was approved in June 2016 by the European Commission as an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors for adult patients with Parkinson’s disease and end-of-dose motor fluctuations who cannot be stabilized on those combinations. We intend to meet with the FDA to discuss a potential New Drug Application submission.

Our Product Pipeline

The following table summarizes our most advanced product candidates currently in clinical development and those currently in research and is followed by detailed descriptions of each program:

<u>Program</u>	<u>Target Indication(s)</u>	<u>Status</u>	<u>Rights</u>
<i>Product candidates in clinical development:</i>			
INGREZZA (valbenazine)	Tardive Dyskinesia	Registration	Neurocrine/Mitsubishi Tanabe
elagolix	Endometriosis	Phase III	AbbVie
elagolix	Uterine Fibroids	Phase III	AbbVie
opicapone	Parkinson’s Disease	Phase III	Neurocrine/BIAL
INGREZZA (valbenazine)	Tourette Syndrome	Phase II	Neurocrine/Mitsubishi Tanabe
NBI-640756	Essential Tremor	Phase I	Neurocrine
NBI-74788	Classic Congenital Adrenal Hyperplasia	Phase I	Neurocrine
<i>Research programs:</i>			
Neurological/Neuropsychiatric (e.g. VMAT2 Inhibitors)	Movement Disorders, Bipolar Disorder and Schizophrenia	Research	Neurocrine
CNS Disorders (Targeted by G Protein-Coupled Receptors and Ion Channels)	Epilepsy, Essential Tremor, Pain, Other Indications	Research	Neurocrine

“Registration” indicates that we have submitted an NDA to the FDA for regulatory approval of the product candidate, for the specified target indication.

“Phase III” indicates that our collaborators are conducting large-scale, multicenter comparative clinical trials on patients afflicted with a target disease in order to provide substantial evidence for efficacy and safety of the product candidate.

“Phase II” indicates that we are conducting clinical trials on groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety of the product candidate.

“Phase I” indicates that we are conducting or initiating clinical trials with a smaller number of subjects to determine early safety profile, maximally tolerated dose and pharmacological properties of the product candidate in human volunteers.

“Research” indicates identification and evaluation of compound(s) in laboratory and preclinical models.

Product Candidates In Clinical Development

INGREZZA (valbenazine) – Vesicular Monoamine Transporter 2 Inhibitor (VMAT2)

VMAT2 is a protein concentrated in the human brain that is essential for the transmission of nerve impulses between neurons. VMAT2 is primarily responsible for packaging and transporting monoamines (dopamine, norepinephrine, serotonin, and histamine) in neurons. Specifically, dopamine enables neurotransmission among nerve cells that are involved in voluntary and involuntary motor control. Disease states such as TD, Tourette syndrome, Huntington’s chorea, schizophrenia, and tardive dystonia are characterized in part by a hyperdopaminergic state in the brain, and modulation of neuronal dopamine levels may provide symptomatic benefits for patients with these conditions, among others.

Tardive dyskinesia. TD is defined by hyperkinetic involuntary movements which arise after months or years of treatment with dopamine receptor blocking agents, e.g. antipsychotics used for treating schizophrenia, bipolar disorder, and depression, and Reglan® (metoclopramide) for nausea and vomiting and gastric emptying in patients with gastroparesis. Features of TD may include grimacing, tongue protrusion, lip smacking, puckering and pursing of the lips, and rapid eye blinking. Rapid movements of the extremities may also occur. The impact on daily function and the quality of life for individuals suffering from TD can be substantial. While the prevalence rates of TD can vary greatly in accordance with the population being studied, it is estimated that approximately 500,000 individuals are affected by TD in the United States alone (Kantar Health).

To address the unmet medical needs of patients suffering from TD, we are developing INGREZZA (valbenazine). INGREZZA causes reversible reduction of dopamine release at the nerve terminal by selectively inhibiting the pre-synaptic VMAT2. In vitro, INGREZZA is a highly selective inhibitor of human VMAT2 showing little or no affinity for VMAT1, other receptors, such as dopamine D2 receptors, other transporters or ion channels. We have designed this novel compound to provide sustained plasma and brain concentrations of the active drug to allow for once daily dosing. INGREZZA has been evaluated in multiple clinical studies to assess its safety, tolerability and efficacy. We believe that the potential efficacy and safety profile of INGREZZA will address many of the shortcomings of current off-label treatments for TD. Finally, INGREZZA may be useful in the treatment of other disorders, such as Huntington’s chorea, schizophrenia, Tourette syndrome and tardive dystonia.

In 2012, we began our INGREZZA late stage clinical TD program. The initial Phase IIb study (Kinect 1 Study) was a randomized, parallel, double-blind, placebo-controlled, clinical trial utilizing the capsule formulation of INGREZZA in moderate to severe TD patients with underlying schizophrenia or schizoaffective disorder. The impact on the dyskinesia was assessed utilizing the Abnormal Involuntary Movement Scale (AIMS). This 109 subject study assessed two doses of once daily INGREZZA over a six-week placebo-controlled dosing period. Approximately half of the randomized subjects received placebo and half received one of two doses of INGREZZA. The two INGREZZA dosing groups consisted of a 50mg group for six weeks and a group that began at 100mg for the initial two weeks and then converted to 50mg for the final four weeks of placebo-controlled dosing period. Subsequent to the placebo-controlled dosing, all subjects were eligible to enter a six-week open label safety extension, during which 50mg of INGREZZA was administered once daily with additional AIMS assessments. The primary endpoint of the study was a comparison of placebo versus active scores utilizing the AIMS at the end of week six as assessed by the on-site AIMS assessors. The 50mg dose of INGREZZA did not reach statistical significance for the primary endpoint at week six.

INGREZZA was generally well tolerated during the twelve weeks of the Kinect 1 Study. During the six-week placebo-controlled treatment period the frequency of treatment-emergent adverse events was 37% for placebo and 26% for INGREZZA. There were no drug-related serious adverse events. The most common treatment emergent adverse event was mild and transient somnolence during the placebo-controlled portion of the study.

Participants in the Kinect 1 Study were assessed utilizing the Barnes Akathisia Ratings Scale (BARS) for akathisia and the Simpson-Angus Scale (SAS) for Parkinsonism. Both of these scales documented minimal symptoms at baseline and were measured as stable to improved during the twelve weeks of treatment. Subjects were also assessed using various safety scales including the Positive and Negative Syndrome Scale (PANSS) for Schizophrenia, the Calgary Depression Scale for Schizophrenia and the Columbia-Suicide Severity Rating Scale (C-SSRS); all of these scores were measured as stable to improved from baseline. Clinical hematology, chemistry and ECG monitoring indicated no emergent safety signals. There were no apparent drug-drug interactions identified in subjects who were utilizing a range of psychotropic and other concomitant medications.

In November 2013, we convened a Scientific Advisory Board (SAB) to review the results of the Kinect 1 Study. The SAB was formed to specifically focus on the dose levels and the AIMS assessment tool. Based on the results of the Kinect 1 Study and the advice from the SAB, the protocol for the second Phase IIb study (Kinect 2 Study) was amended to change the primary endpoint from on-site AIMS assessments to a blinded central video assessment conducted by two movement disorder specialists who would review the AIMS videos in a scrambled fashion and concur on a final AIMS score for each video.

The Kinect 2 Study was a randomized, parallel, double-blind, placebo-controlled, clinical trial utilizing the capsule formulation of INGREZZA in moderate to severe TD patients with underlying mood disorders, schizophrenia and schizoaffective disorders, and gastrointestinal disorders. This study randomized 102 patients into a six-week placebo-controlled dosing period where half of the subjects received placebo and half received INGREZZA. The study began with all subjects on once daily 25mg of INGREZZA, or placebo. The treating physician was then permitted to escalate the dose at two-week intervals, at the end of week two and at the end of week four, to a maximum dose of once daily 75mg. The dose escalation was determined by the treating physician based on week two and week four on-site AIMS assessments coupled with safety and tolerability assessments at these same time points. By week six, approximately 70% of the ITT subjects, randomized to INGREZZA, were titrated to the 75 mg dose, approximately 20% were titrated to the 50mg dose and the remaining subjects received 25 mg of INGREZZA. The primary endpoint of the study was a comparison of placebo versus active scores utilizing the AIMS at the end of week six as assessed by scrambled blinded central video assessment conducted by two movement disorder specialists. The mean baseline AIMS score for the placebo group was 7.9 compared to 8.0 for the INGREZZA group.

At week six, AIMS scores, as assessed by blinded central video raters, were reduced by 2.6 points in the INGREZZA intention-to-treat (ITT) group (n=45) compared to a reduction of 0.2 points in the placebo arm (n=44) ($p<0.001$). Additionally, the responder rate ($\geq 50\%$ improvement from baseline) was 49% in the INGREZZA ITT group compared to 18% in placebo ($p=0.002$). In the per-protocol (PP) group (n=78) (the PP group excludes subjects whose plasma concentrations of INGREZZA were below the lower limit of quantitation and it was determined that these subjects had not ingested the study drug) AIMS scores were reduced by 3.3 points for those subjects taking INGREZZA ($p<0.001$), with a corresponding responder rate of 59% ($p<0.001$). The improvement in week six AIMS was also corroborated by on-site treating physicians utilizing the Clinical Global Impression–Tardive Dyskinesia (CGI-TD) scale scores. Treating clinicians determined that approximately 67% of the subjects taking INGREZZA were “much improved” or “very much improved” at week six compared to only 16% of the placebo subjects ($p<0.001$) in this pre-specified key secondary efficacy endpoint.

In the Kinect 2 Study INGREZZA was generally safe and well tolerated. During the six-week treatment period the frequency of treatment-emergent adverse events was 33% for placebo and 43% for INGREZZA. There were no drug related serious adverse events. The most common treatment emergent adverse events were fatigue

in five subjects (9.8%) randomized to INGREZZA versus two subjects (4.1%) in the placebo group, and headache reported by four subjects (7.8%) on INGREZZA versus two subjects (4.1%) on placebo. Discontinuation rates were similar in both the INGREZZA and placebo treatment groups with five per study arm (none of which were study drug related).

Participants in the Kinect 2 Study were assessed utilizing the BARS for akathisia and the SAS for Parkinsonism. Both of these scales documented minimal symptoms at baseline and there was no worsening during the six weeks of treatment. Clinical hematology, chemistry and ECG monitoring indicated no emergent safety signals. There were no drug-drug interactions identified in subjects who were utilizing a range of psychotropic and other concomitant medications.

Subsequent to completion of the Kinect 2 Study, in a post-hoc analysis, the Kinect 1 Study videos were evaluated by performing the same comparison of placebo versus active scores employed in the Kinect 2 Study. We engaged two movement disorder specialists, both of whom were not involved with the Kinect 1 Study, to assess the Kinect 1 Study baseline and week six videos utilizing AIMS in a randomized blinded central video assessment. These raters scored the mean baseline AIMS of 8.0 for the Kinect 1 Study. After six weeks of treatment, these raters scored the placebo group in the Kinect 1 Study with a mean reduction from baseline of 0.1 points while the INGREZZA group was scored with a mean reduction from baseline of 1.3 points.

The data from the Kinect 1 and Kinect 2 studies, along with the other Phase I and Phase II clinical studies, preclinical work, and drug manufacturing data formed the basis for an end of Phase II meeting that was held with the FDA in June of 2014. During this meeting, the FDA reviewed the current data package and overall clinical development plan for INGREZZA including the proposed Phase III development to support the registration of INGREZZA in the United States as a treatment for TD. Based on the results of this meeting and the related minutes, we conducted a single placebo-controlled Phase III study of INGREZZA, the Kinect 3 Study.

The Kinect 3 Study was initiated during the fourth quarter of 2014. The Kinect 3 Study was a randomized, parallel-group, double-blind, placebo-controlled clinical trial utilizing the capsule formulation of INGREZZA in moderate to severe TD subjects with an underlying diagnosis of mood disorder, schizophrenia or schizoaffective disorder. The primary endpoint in the Kinect 3 Study was the mean change from baseline in the AIMS as assessed by blinded central raters. The Kinect 3 Study randomized approximately 230 subjects to either placebo, once daily 40mg of INGREZZA or once daily 80mg of INGREZZA for 6 weeks of placebo-controlled dosing followed by an extension of active dosing through week 48.

The AIMS ratings at week 6 for the 80mg once-daily INGREZZA ITT population was reduced 3.1 points (Least-Squares Mean) more than placebo ($p < 0.0001$). In addition to the primary efficacy endpoint, the AIMS rating for the 40mg once-daily dose and the CGI-TD for both doses were also evaluated. The table below summarizes the results of the AIMS ratings and CGI-TD at week 6 for both the ITT population and a preliminary pre-specified per-protocol (PP) population, which excludes subjects whose plasma concentrations of INGREZZA were below the lower limit of quantitation and it was determined that these subjects had not ingested the study drug.

	Week 6			
	40mg qd	p-value*	80mg qd	p-value*
AIMS Difference from Placebo				
Least-Squares Mean (ITT population)	-1.8	0.0021	-3.1	<0.0001
Least-Squares Mean (PP population)	-2.1	0.0009	-3.6	<0.0001
CGI-TD Difference from Placebo				
Least-Squares Mean (ITT population)	-0.3	0.0742	-0.3	0.0560
Least-Squares Mean (PP population)	-0.4	0.0097	-0.4	0.0122

* Assessment of the significance of p-values based on pre-specified, fixed-sequence testing procedure

During the six-week placebo-controlled treatment period INGREZZA was generally well tolerated. The frequency of adverse events was similar among all treatment groups and treatment emergent adverse effects were consistent with those of prior studies. Clinical hematology, chemistry and ECG monitoring indicated no emergent safety signals. There were no drug-drug interactions identified in subjects who were utilizing a wide range of psychotropic and other concomitant medications.

The Kinect 3 Study included a blinded extension phase with an additional 42 weeks of INGREZZA administration of either 40mg or 80mg once daily. Adverse events and the effects on AIMS were assessed during the 42-weeks of post placebo-controlled dosing and at Week 52 following cessation of INGREZZA. AIMS scores showed sustained improvement during this 42-week period, and adverse events were consistent with the placebo-controlled period of the trial.

In addition to the Kinect 3 Study, we are also conducting a separate one-year open-label safety study of 40mg once daily and 80mg once daily INGREZZA (the Kinect 4 Study) as well as a roll-over study for those patients who complete the one year of dosing in either the Kinect 3 or Kinect 4 studies. This roll-over study is designed to permit open-label access to INGREZZA for up to an additional 72 weeks of treatment.

In October 2014, the FDA granted us breakthrough therapy designation for INGREZZA, for the treatment of TD. Breakthrough therapy designation is granted for a drug that is intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement on clinically significant endpoints over available therapies. This designation also allows intensive discussions with the FDA which are intended to expedite the development and review process of eligible drugs.

On August 11, 2016, we submitted an NDA for INGREZZA for the treatment of TD to the FDA. The NDA was accepted for Priority Review by the FDA and given a PDUFA target action date of April 11, 2017.

In preparation for a planned commercial launch of INGREZZA, we have an ongoing TD disease education and awareness campaign that includes educational programs with health care professionals, a TD educational website and a strong presence at neurology and psychiatric medical meetings. We have also established our core commercial team that is comprised of experienced professionals in marketing, access and reimbursement, managed markets, marketing research, commercial operations, and sales force planning and management. We are preparing to build a specialty sales force in the United States of approximately 140 experienced sales professionals who will primarily interact with neurologists and psychiatrists.

Tourette syndrome. Tourette syndrome is a neurological disorder that consists of rapid, non-rhythmic stereotyped motor and vocal tics. Motor tics are typically characterized by facial grimacing, head jerks, extremity movements and other dystonic movements. Vocal tics typically include grunting, throat clearing, and repeating words and phrases. The average age of onset for Tourette syndrome is approximately six years, with symptoms reaching their peak severity at approximately age ten. Tourette syndrome is more commonly diagnosed in males than females and may also be associated with attention deficit hyperactivity disorder and obsessive compulsive disorder. We believe there are approximately 400,000 people with Tourette syndrome in the United States.

We have completed juvenile rodent preclinical studies of INGREZZA and based on the results of these preclinical studies, we initiated the T-Force Study in children and adolescents with Tourette syndrome in early 2015. The T-Force Study was an open-label, multiple ascending dose, pharmacokinetic and pharmacodynamic study to evaluate the safety, tolerability and exposure-response of INGREZZA in children and adolescents with Tourette syndrome. A total of 28 patients were evaluated over 14 days of once daily dosing followed by 7 days off-drug at 10 study centers in the United States. The study was divided into two dosing groups consisting of children (ages 6-11) and adolescents (ages 12-18), and each age group was further divided into three dosing cohorts. Subsequent dose escalations for children and adolescents were based, in part, on the pharmacokinetic and safety data from the previous cohort in each age group. The Yale Global Tic Severity Scale was also assessed and after two weeks of treatment showed a mean reduction of 31% from baseline scores, with over half of the subjects considered clinical responders. Based on the results of the T-Force study, we initiated the Phase II program in Tourette syndrome.

The T-Forward study was a randomized, double-blind, placebo-controlled, multi-dose, parallel group, study that enrolled 124 adults with moderate to severe Tourette syndrome. Two once-daily fixed doses of INGREZZA were evaluated versus placebo in a 1:1:1 randomization. The three-arm study included eight weeks of dosing followed by two weeks off-drug at 32 study centers in the United States to assess the safety, tolerability and efficacy of INGREZZA in Tourette patients. The primary endpoint of this study was a change from baseline of placebo versus active scores utilizing the Yale Global Tic Severity Scale at the end of week 8. Tourette symptoms were also be evaluated via the Premonitory Urge for Tics Scale as well as Clinical Global Impression of Change scales, among others. While the T-Forward study showed a significant improvement in overall symptoms of Tourette syndrome as evidenced by the Clinical Global Impression of Change ($p=0.015$), the pre-specified primary endpoint, the change-from-baseline in the Yale Global Tic Severity Scale at week 8 was not met ($p=0.18$). Adverse events were dose dependent and consistent with earlier clinical studies.

The T-Force GREEN study is a multicenter, randomized, double-blind, placebo-controlled, multi-dose, parallel group, Phase II study to evaluate the safety, tolerability and efficacy of INGREZZA in up to 90 pediatric patients with moderate to severe Tourette syndrome. Once-daily fixed doses of INGREZZA will be evaluated versus placebo in a 1:1:1 randomization. The three-arm study will evaluate up to approximately 45 children and 45 adolescents over six weeks of dosing followed by two weeks off-drug at approximately 40 study centers in the United States. The primary endpoint of this study is the change from baseline of the Yale Global Tic Severity Scale between placebo and active treatment groups at the end of week six. Tourette symptoms will also be evaluated via the Rush Video-Based Tic Rating Scale, Premonitory Urge for Tics Scale as well as Clinical Global Impression scales, among others. Top-line data from the T-Force GREEN study is expected in the second quarter of 2017.

The T-Fusion study is an open-label extension study for subjects (pediatric and adult) who have completed the T-Forward study or the T-Force GREEN study and who elect to continue receiving INGREZZA for an additional 24 weeks of treatment. Safety and efficacy assessments are conducted as outlined in the preceding studies. This study commenced in July 2016 and the last subject is expected to complete treatment during 2017.

We plan to utilize the results of these initial Tourette studies to design a Phase III program for INGREZZA in Tourette syndrome.

elagolix – Gonadotropin-Releasing Hormone (GnRH) Antagonist

GnRH is a peptide that stimulates the secretion of the pituitary hormones that are responsible for sex steroid production and normal reproductive function. Researchers have found that chronic administration of GnRH agonists, after initial stimulation, reversibly shuts down this transmitter pathway and is clinically useful in treating hormone-dependent diseases such as endometriosis and uterine fibroids. Several companies have developed peptide GnRH agonists on this principle, such as Lupron® and Zoladex®. However, since these molecules are peptides, they must be injected via a depot formulation rather than the preferred oral route of administration. In addition, GnRH agonists can take up to several weeks to exert their desired effect once the initial stimulation has occurred, a factor not seen with the use of GnRH antagonists. Upon administration, GnRH agonists have shown a tendency to exacerbate the condition via a hormonal flare. More importantly the profound suppression effect observed with GnRH agonists is similar to that seen after menopause and can be associated with hot flashes and the loss of bone mineral density.

Orally active, nonpeptide GnRH antagonists potentially offer several advantages over injectable GnRH peptide drugs, including rapid onset of hormone suppression without hormonal flare. Also, injection site reactions commonly observed in peptide depots are avoided and dosing can be rapidly discontinued if necessary – a clinical management option not available with long-acting depot injections. Additionally, by using GnRH antagonists, it may be possible to alter the level of pituitary GnRH suppression thereby titrating circulating hormone levels.

In June 2010, we entered into an exclusive worldwide collaboration with AbbVie to develop and commercialize elagolix and all next-generation non-peptide GnRH antagonists (collectively, GnRH Compounds) for women's and men's health indications. Under the terms of the agreement, AbbVie is responsible for all development, marketing and commercialization costs and has primary responsibility for all regulatory interactions with the FDA related to elagolix and other GnRH Compounds covered by the collaboration. AbbVie is currently in Phase III evaluation of elagolix in two indications, endometriosis and uterine fibroids.

Endometriosis. Endometriosis is associated with a multitude of symptoms, some of the most common of which include pain related both to menstruation (dysmenorrhea) and sexual intercourse (dyspareunia) as well as chronic pelvic pain throughout the menstrual cycle, infertility, and menorrhagia, among many others. The wide range of symptoms associated with endometriosis serves to complicate and delay diagnosis due to the significant overlap of symptoms with the disease profiles of other conditions. The World Endometriosis Research Foundation estimates that there are over 170 million women worldwide who suffer from endometriosis, including approximately 7.5 million women in the United States alone. We believe that the availability of an oral treatment, lacking the side effect profile of the currently available peptide GnRH agonists, may be a desirable alternative to current pharmaceutical therapies and ultimately encourage a significantly higher treatment rate.

The endometriosis Phase III program evaluated two separate doses of elagolix (150mg once daily and 200mg twice daily) over a 24-week treatment period. The initial randomized, parallel, double-blind, placebo-controlled pivotal trial (Violet PETAL) enrolled 872 women in approximately 160 clinical sites throughout the United States, Canada and Puerto Rico. The co-primary endpoints were a comparison of the daily non-menstrual pelvic pain and daily dysmenorrhea scores during the third month of treatment to the respective daily baseline scores utilizing a responder analysis. Maintenance of response at month six was also assessed utilizing the same daily scales.

In January 2015, AbbVie announced the top-line results of the initial six months of placebo-controlled dosing of the Violet PETAL study. After six months of continuous treatment, both doses of elagolix (150mg once daily and 200mg twice daily) met the study's co-primary endpoints ($p < 0.001$) of reducing scores of non-menstrual pelvic pain and dysmenorrhea associated with endometriosis, at month three, as well as at month six.

The observed safety profile of elagolix in the Violet PETAL study was consistent with observations from earlier clinical studies. Among the most common adverse events were hot flush, headache, nausea and fatigue. While most adverse events were similar across treatment groups, some, such as hot flush and bone mineral density loss, were dose-dependent. Overall discontinuation rates were similar across treatment groups and discontinuations specifically due to adverse events were 5.9%, 6.4%, and 9.7% for placebo, 150 mg once daily and 200 mg twice daily, respectively.

Additional efficacy and safety endpoints for the patients enrolled in the Violet PETAL study were measured through one year of continuous dosing as well as for a period of time after the final dose. The one-year dosing portion of this study concluded in mid-2015. In July 2015, AbbVie announced that the efficacy and safety data at one year was consistent with the data witnessed at six months.

In February 2016, AbbVie announced the top-line results from the second of the two Phase III elagolix endometriosis clinical trials, the Solstice Study, a multinational study designed to evaluate the efficacy and safety of elagolix in 815 premenopausal women with endometriosis. The top-line results from this trial were consistent with those of the Violet PETAL Study; after six months of treatment, both doses of elagolix (150 mg once daily and 200 mg twice daily) met the Solstice Study's co-primary endpoints of reducing scores of non-menstrual pelvic pain and menstrual pain (or dysmenorrhea) associated with endometriosis at month three, as well as month six. The observed safety profile of elagolix in the Solstice Study was consistent with observations from prior studies. Among the most common adverse events were hot flush, headache, and nausea. While most adverse events were similar across treatment groups some, such as hot flush and bone mineral density loss, were dose-dependent. Overall discontinuation rates were similar across treatment groups (25.3%, 21.2%, and 19.7% for placebo, 150 mg once daily and 200 mg twice daily, respectively); discontinuations specifically due to treatment

emergent adverse events were 6.1%, 4.4%, and 10.0% for placebo, 150 mg once daily and 200 mg twice daily, respectively. Patients in the Solstice Study were eligible to continue on in either post-treatment follow-up or a blinded extension study for an additional six-month safety and efficacy evaluation of elagolix.

AbbVie is targeting a third quarter of 2017 NDA submission to the FDA for elagolix in the treatment of endometriosis.

Uterine Fibroids. Uterine fibroids are benign hormonally responsive tumors that form in the wall of the uterus. They are the most common solid tumor in women with a prevalence rate of at least 25% (American College of Obstetricians and Gynecologists). While many women do not have symptoms, depending on the size, location and number, uterine fibroids can cause symptoms such as: longer, more frequent, or heavy menstrual bleeding, menstrual pain, vaginal bleeding at time other than menstruation, pain in the abdomen or lower back, pain during sex, difficulty urinating, frequent urination, constipation or rectal pain. Due to the severity of symptoms, treatment sometimes requires surgery, including the removal of the uterus. In fact, uterine fibroids is a leading indication for hysterectomy in the United States, with approximately 250,000 hysterectomies performed each year related to uterine fibroids (Whiteman *et al AJOG* 2008, 198, e1). We believe that a safe and effective oral therapy would be a preferred treatment regimen rather than surgical intervention.

AbbVie conducted a Phase IIb clinical trial that enrolled approximately 570 women with heavy uterine bleeding due to uterine fibroids at approximately 100 sites in the United States, Canada, Puerto Rico, Chile and the United Kingdom. The trial was a 24-week, randomized, double-blind, multicenter, placebo-controlled, two cohort design study that evaluated the safety and efficacy of two different elagolix treatment regimens (300mg twice daily and 600mg once daily) alone and in combination with two different strengths of hormonal add-back therapy (estradiol/norethindrone acetate). The primary endpoint of the study was an assessment of uterine blood loss after six months of treatment. Secondary efficacy endpoints included change in uterine volume, fibroid volume, and menstrual patterns. Safety assessments of bone mineral density, comparing baseline to month six, were performed via DXA scan. Patients were also followed off drug for up to six months.

Results from this Phase IIb study show elagolix reduced heavy menstrual bleeding in all treatment arms. The study's primary endpoint, a composite design where subjects had to achieve a menstrual blood loss (MBL) volume of less than 80 mL as well as a 50 percent or greater reduction in MBL volume from baseline at the final study month, was met for all dosing regimens ($p < 0.001$) as assessed utilizing a quantitative measure of reduction in uterine blood flow, the alkaline hematin method.

Among the most common adverse events were hot flush, headache, nausea, and vomiting. Some adverse events such as hot flush were more frequent in the elagolix only treatment arms versus the placebo and elagolix with add back therapy treatment arms. Reduction in bone mineral density associated with elagolix alone was attenuated when elagolix was co-administered with hormonal add-back therapy.

AbbVie initiated Phase III studies of elagolix in patients with uterine fibroids in early 2016. The Phase III program includes two replicate, pivotal, six-month efficacy and safety studies followed by a six-month safety and efficacy extension study. AbbVie is evaluating 300mg of elagolix dosed twice daily both alone and in combination with hormonal add-back therapy (estradiol/norethindrone acetate). The primary endpoint in these Phase III studies will be the same as that employed in the Phase IIb study: percent of subjects with reduction in uterine blood flow as measured by the alkaline hematin method. Initial top-line data from this Phase III program is expected in late 2017.

opicapone, Catechol-O-methyltransferase inhibitor

COMT inhibitors are utilized to prolong the duration of effect of levodopa which is utilized as a primary treatment option for Parkinson's disease patients. Administration of levodopa often results in adequate control of Parkinson's symptoms, also referred to as "on-time," however, there are periods of the day where the effects of levodopa wear off and motor symptoms worsen, these are considered "off-time." Opicapone is a novel, once-

daily, peripherally-acting, highly-selective COMT inhibitor utilized as adjunct therapy to levodopa in Parkinson's patients. Opicapone works through decreasing the conversion rate of levodopa into 3-O-methyldopa, thereby reducing the off-time period of Parkinson's and extending the on-time period.

In February 2017, we entered into an exclusive license agreement with BIAL for the development and commercialization of opicapone for the treatment of human diseases and conditions, including Parkinson's disease, in the United States and Canada. Under the terms of the agreement, we will be responsible for the development and commercialization of opicapone in the United States and Canada.

Parkinson's Disease. Parkinson's disease is a chronic and progressive movement disorder that affects approximately one million people in the United States. The disease is characterized by a loss of neurons in the substantia nigra, the area of the brain where dopamine is produced. Dopamine production and synthesis is necessary for coordination and movement. As Parkinson's progresses, dopamine production steadily decreases resulting in tremor, slowed movement (bradykinesia), impaired posture and balance, and speech and writing problems. There is no present cure for Parkinson's; disease and management consists of controlling the motor symptoms primarily through administration of levodopa therapies. While this improves the control of Parkinson's symptoms, the disease progresses and the beneficial effects of levodopa begin to wear off, symptoms worsen and patients experience end-of-dose motor fluctuations. These end of dose motor fluctuations are improved with the addition of a COMT inhibitor to levodopa.

In June 2016, the European Commission authorized ONGENTYS® (opicapone) as an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors (DDCIs) in adult patients with Parkinson's disease and end-of-dose motor fluctuations who cannot be stabilized on those combinations. This approval was based on data from a clinical development program that included 28 clinical studies of more than 900 patients treated with opicapone in 30 countries worldwide.

The two pivotal Phase III studies utilized for European approval, BIPARK-I and BIPARK-II, demonstrated that opicapone once-daily achieved a statistically significant decrease in off-time periods for Parkinson's patients compared to placebo. The BIPARK-I study was a placebo-controlled study of approximately 600 patients that also included entacapone as an active comparator. The results of this study also showed that once-daily opicapone was non-inferior to entacapone which is dosed multiple times per day. The BIPARK-II study was a placebo-controlled study of approximately 400 patients that also showed a significant decrease in off-time periods for Parkinson's patients. In both studies, opicapone was associated with significant improvements in both patient and clinician global assessments of change. The data from these two Phase III trials also demonstrated that opicapone improved motor fluctuations in levodopa-treated patients regardless of concomitant dopamine agonist or monoamine oxidase type B inhibitors used. Opicapone was generally well tolerated and was not associated with relevant electrocardiographic or hepatic adverse events.

Both of the BIPARK Phase III trials included a one-year open-label extension where opicapone sustained the decrease in off-time and increase in on-time periods that was demonstrated during the double-blind placebo-controlled portion of the studies.

We intend to meet with the FDA during 2017 to discuss a potential NDA submission for opicapone. We also intend to commercialize opicapone in the United States upon FDA approval.

NBI-640756, Essential Tremor

Essential Tremor. Essential tremor is one of the most common neurological disorders in adults, impacting an estimated 10 million individuals in the United States (International Essential Tremor Foundation). The disorder is characterized by involuntary, rhythmic, oscillatory movements that most often affect the upper limbs. As the disease progresses, tremor severity often increases and spreads to other parts of the body. Essential tremor has a significant impact on the activities of daily living often resulting in functional disability as the disease progresses and is associated with a high comorbidity rate of social phobia, depression and anxiety. Current pharmacological therapies utilized in the treatment of essential tremor include propranolol and primidone. Deep

brain stimulation, an invasive procedure involving the implantation of electrodes within certain areas of the brain, is sometimes utilized for severe essential tremor.

NBI-640756 is a novel molecule which was discovered in our laboratories. We have successfully completed a single site, randomized, double-blind, placebo-controlled sequential dose-escalation, Phase I safety and pharmacokinetics study exploring a once-daily dose of NBI-640756 in approximately 32 healthy volunteers. The study was conducted in multiple sequential cohorts of eight subjects per cohort. Based on the positive results of this initial Phase I study, we initiated a multiple ascending dose study of NBI-640756.

This second Phase I study is a single site, randomized, double-blind, placebo-controlled, multiple-dose, sequential dose-escalation study to evaluate the safety, tolerability and pharmacokinetics of NBI-640756 in up to 30 healthy volunteers over a week of continuous dosing. This study is also being conducted in multiple sequential cohorts of ten subjects per cohort; data from this second Phase I study is expected in 2017.

The data from both of these Phase I studies, as well as preclinical data will be evaluated and utilized in the design of the anticipated Phase II program for NBI-640756 in subjects with essential tremor.

Corticotropin-Releasing Factor (CRF) Receptor₁ Antagonist (NBI-74788)

CRF is a hypothalamic hormone released directly into the hypophyseal portal vasculature which acts on specific CRF₁ receptors on corticotropes in the anterior pituitary to stimulate the release of adrenocorticotropin hormone (ACTH). The primary role of ACTH is the stimulation of the synthesis and release of adrenal steroids including cortisol. Cortisol from the adrenals have a negative feedback role at the level of the hypothalamus that decreases CRF release as well as at the level of the pituitary to inhibit the release of ACTH. This tight control loop is known as the hypothalamic-pituitary-adrenal (HPA) axis. Blockade of CRF receptors at the pituitary has been shown to decrease the release of ACTH and subsequently attenuate the production and release of adrenal steroids.

Classic congenital adrenal hyperplasia. Classic congenital adrenal hyperplasia (classic CAH) is a group of autosomal recessive genetic disorders that affects approximately 20,000-30,000 people in the United States and results in an enzyme deficiency altering the production of adrenal steroids. Because of this deficiency, the adrenal glands have little to no cortisol biosynthesis resulting in a potentially life-threatening condition. If left untreated, classic CAH can result in salt wasting, dehydration and eventually death. Even with cortisol replacement, persistent elevation of ACTH from the pituitary gland results in excessive androgen levels leading to virilization of females including precocious puberty, menstrual irregularity, short stature, hirsutism, acne and fertility problems.

Corticosteroids are the current standard of care for classic CAH and are used chronically to both correct the endogenous cortisol deficiency and to reduce the excessive ACTH levels and androgen excess. However, the dose and duration of steroid use required to suppress ACTH is well above the normal physiological level of cortisol; resulting in metabolic syndrome, bone loss, growth impairment, and Cushing's syndrome as common and serious side effects.

NBI-74788 is a potent, selective, orally-active, non-peptide CRF receptor antagonist as demonstrated in a range of in vitro and in vivo assays. Blockade of CRF receptors at the pituitary has been shown to decrease the release of ACTH, which in turn decreases the production of adrenal steroids including androgens, and potentially the symptoms associated with classic CAH. Lower ACTH levels would also reduce the amount of exogenous corticosteroid necessary for classic CAH patients to thrive avoiding the side-effects currently associated with excessive steroid therapy.

We plan to conduct a Phase I single ascending dose study of NBI-74788 in healthy volunteers in 2017. If the pharmacokinetic, safety and tolerability data are favorable, we then plan to conduct a pilot clinical trial of NBI-74788 in adult patients with refractory classic CAH. This pilot study is designed to be a blinded, single-site,

pharmacokinetic/pharmacodynamic study assessing two single, ascending doses of NBI-74788 in up to twelve study participants. Key pharmacodynamic biomarker measurements include ACTH, 17-hydroxyprogesterone (17-OHP), androgen, and cortisol levels collected the morning following bedtime dosing.

We intend to apply for orphan drug designation for NBI-74788 in the treatment of congenital adrenal hyperplasia. Orphan drug designation is granted by the FDA to medicines intended for the treatment, diagnosis or prevention of rare diseases or disorders that affect fewer than 200,000 people in the United States and provides sponsors with development and commercial incentives for such designated compounds and medicines.

Research Programs

Our research and development focus is on addressing diseases and disorders of the central nervous and endocrine systems, which include therapeutic categories ranging from HPA disorders to stress-related disorders and neurological/neuropsychiatric diseases. Central nervous system and endocrinology drug therapies are among the largest therapeutic categories, accounting for over \$150 billion in worldwide drug sales according to GlobalData (2014).

Neurological/Neuropsychiatric: VMAT2 Inhibitors

VMAT2 inhibition results in the modulation of dopamine pathways which may also be useful for patients suffering from schizophrenia. Approximately 2.2 million people in the United States suffer from schizophrenia at an estimated annual cost of \$62 billion. Our discovery efforts around VMAT2 inhibitors also focus on developing novel therapies for schizophrenia sufferers.

CNS Disorders (Targeted by G Protein-Coupled Receptors and Ion Channels)

G Protein-Coupled Receptors (GPCRs) are the largest known gene superfamily of the human genome. Greater than thirty percent of all marketed prescription drugs act on GPCRs; which makes this class of proteins historically the most successful therapeutic target family. However, only a small fraction of the GPCR gene superfamily has been exploited. Ion channels appear to be represented by approximately 400 genes in the human genome and are currently the targets for approximately seven percent of the current marketed drugs. Next generation therapies derived from targeting GPCRs and ion channels will be discovered through the understanding of the complex relationships of drug/receptor interactions and their subsequent impact on efficacy, downstream signaling networks and regulation.

Our GPCR research platform has met this requirement by integrating drug discovery research efforts with a suite of assays and assay systems and automated analytical techniques. This process, now also applied to ion channels, provides an unbiased profile of pharmacological protein/ligand interactions coupled with in vivo efficacy using discrete animal models allowing for rapid discovery of initial leads and advancement into preclinical and clinical development. Importantly, this design cycle is not limited to GPCRs or ion channel targets, but can be utilized for other recently identified proteins that play a role in human disease where current treatments or therapies are either inadequate or nonexistent.

Our Business Strategy

Our goal is to become the leading biopharmaceutical company focused on neurological and endocrine-related diseases and disorders. The following are the key elements of our business strategy:

Continuing to Advance and Build Our Product Portfolio Focused on Neurological and Endocrine-Related Diseases and Disorders. We believe that by continuing to advance and extend our product pipeline, we can mitigate some of the clinical development risks associated with drug development. We currently have multiple

programs in various stages of research and development. Our three lead late-stage clinical programs are elagolix, a GnRH antagonist in Phase III development for endometriosis and uterine fibroids that is partnered with AbbVie, INGEREZZA (valbenazine) our VMAT2 inhibitor for the treatment of movement disorders for which an NDA is under review by the FDA for TD and which is also in Phase II development for Tourette syndrome, and opicapone, a highly-selective COMT inhibitor that is an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors for adult patients with Parkinson's disease and was inlicensed from BIAL. We take a portfolio approach to managing our pipeline that balances the size of the market opportunities with clear and defined clinical and regulatory paths to approval. By doing so, we focus our internal development resources on innovative therapies with improved probabilities of technical and commercial success.

Maintaining Certain Commercial Rights to Our Product Portfolio to Evolve into a Fully-Integrated Pharmaceutical Company. We intend to retain commercial rights to certain products, including INGEREZZA, that we can effectively and efficiently develop, secure regulatory approval and commercialize. These include products with a concentrated prescriber base and well-defined patient population that can be accessed with an efficient patient and prescriber outreach program.

Selectively Establishing Corporate Collaborations with Global Pharmaceutical Companies to Assist in the Development of Our Products and Mitigate Financial Risk while Retaining Significant Commercial Upside. We leverage the development, regulatory and commercialization expertise of our corporate collaborators to accelerate the development of certain of our potential products, while typically retaining co-promotional rights, and at times commercial rights, in North America. We intend to further leverage our resources by selectively entering into additional strategic alliances to enhance our internal development and commercialization capabilities by licensing our technology.

Identifying Novel Drugs to Address Unmet Market Opportunities. We seek to identify and validate novel drugs on characterized targets for internal development or collaboration. For example, GnRH antagonists, compounds designed to reduce the secretions of sex steroids, may represent the first novel non-peptide, non-injectable means of treatment of endometriosis. We believe the creativity and productivity of our discovery research group will continue to be a critical component for our continued success. Research and development costs were \$94.3 million, \$81.5 million and \$46.4 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Acquiring Rights to Complementary Drug Candidates and Technologies. We plan to continue to selectively acquire rights to products in various stages of development to take advantage of our drug development capabilities. For example, in February 2017, we entered into an exclusive license agreement with BIAL for the development and commercialization of opicapone for the treatment of human diseases and conditions, including Parkinson's disease, in the United States and Canada. Under the terms of the agreement, we will be responsible for the development and commercialization of opicapone in the United States and Canada.

Our Corporate Collaborations and Strategic Alliances

One of our business strategies is to utilize strategic alliances to enhance our development and commercialization capabilities. The following is a summary of our significant collaborations/alliances:

AbbVie Inc. (AbbVie). In June 2010, we announced an exclusive worldwide collaboration with AbbVie to develop and commercialize elagolix and all next-generation GnRH antagonists (collectively, GnRH Compounds) for women's and men's health. AbbVie made an upfront payment of \$75 million and has agreed to make additional development and regulatory event based payments of up to \$480 million and up to an additional \$50 million in commercial event based payments. Under the terms of the agreement, AbbVie is responsible for all development, marketing and commercialization costs. We received funding for certain internal collaboration expenses which included reimbursement from AbbVie for internal and external expenses related to the GnRH Compounds and personnel funding through the end of 2012. We will be entitled to a percentage of worldwide

sales of GnRH Compounds for the longer of ten years or the life of the related patent rights. Under the terms of our agreement with AbbVie, the collaborative development effort between the parties to advance GnRH compounds towards commercialization was governed by a joint development committee with representatives from both us and AbbVie. The collaborative development portion of the agreement concluded, as scheduled, on December 31, 2012. AbbVie may terminate the collaboration at its discretion upon 180 days written notice to us. In such event, we would be entitled to specified payments for ongoing clinical development and related activities and all GnRH Compound product rights would revert to us. Since the inception of the agreement, we have recorded revenues of \$75.0 million related to the amortization of up-front license fees, \$45.0 million in milestone revenue, and \$37.0 million of sponsored development revenue.

Mitsubishi Tanabe Pharma Corporation (Mitsubishi Tanabe). In March 2015, we entered into a collaboration and license agreement with Mitsubishi Tanabe for the development and commercialization of INGREZZA for movement disorders in Japan and other select Asian markets. Mitsubishi Tanabe made an up-front license fee payment of \$30 million and has agreed to make additional development and commercialization event-based payments totaling up to \$85 million, payments for the manufacture of pharmaceutical products, and royalties on product sales in select territories in Asia. Under the terms of the agreement, Mitsubishi Tanabe is responsible for all third-party development, marketing and commercialization costs in Japan and other select Asian markets with the exception of a single Huntington's chorea clinical trial to be performed by us, at an estimated cost of approximately \$12 million, should Mitsubishi Tanabe request the clinical trial. We will be entitled to a percentage of sales of INGREZZA in Japan and other select Asian markets for the longer of ten years or the life of the related patent rights. Mitsubishi Tanabe may terminate the agreement at its discretion upon 180 days' written notice to us. In such event, all INGREZZA product rights for Japan and other select Asian markets would revert to us.

BIAL – Portela & Ca, S.A. (BIAL). In February 2017, we entered into an exclusive license agreement with BIAL for the development and commercialization of opicapone for the treatment of human diseases and conditions, including Parkinson's disease, in the United States and Canada. Under the terms of the agreement, we are responsible for the management and cost of all opicapone development and commercialization activities in the United States and Canada. Under the terms of the agreement, we will pay BIAL an upfront license fee of \$30 million, and we may also be required to pay up to an additional \$115 million in milestone payments associated with the regulatory approval and net sales of products containing opicapone. In addition, we will pay BIAL a percentage of net sales in exchange for the manufacture and supply of opicapone drug product.

Upon commercialization, BIAL and us will agree on annual sales forecasts. If we fail to meet the minimum sales requirements for a particular year, we will be required to pay BIAL an amount corresponding to the difference between the actual net sales and the minimum sales requirements for such year, and if we fail to meet the minimum sales requirements for any two years, BIAL may terminate the agreement. The agreement also contemplates that we will purchase, and BIAL will supply, all drug product and investigation medicinal product for our development and commercialization activities. BIAL has the right to co-promote opicapone within the United States and Canada during certain periods of time. If BIAL exercises its option to co-promote the licensed products, we will enter into a co-promotion agreement with BIAL at a future time.

The agreement, unless terminated earlier, will continue on a licensed product by licensed product and country by country basis until a generic product in respect of such licensed product under the agreement is sold in a country and sales of such generic product are greater than a specified percentage of total sales of such licensed product in such country. Either party may terminate the agreement earlier if the other party materially breaches the agreement and does not cure the breach within a specified notice period, or upon the other party's insolvency. BIAL may terminate the agreement if we fail to use commercially reasonable efforts or fail to file an NDA for a licensed product by a specified date or under certain circumstances involving a change of control. In certain circumstances where BIAL elects to terminate the agreement in connection with our change of control, BIAL shall pay us a termination fee. We can terminate the agreement at any time for any reason upon six months written notice to BIAL if prior to the first NDA approval in the United States, and upon nine months written

notice to BIAL if such notice is given after the first NDA approval in the United States. If our termination request occurs prior to the first NDA approval in the United States, we will have to pay BIAL a termination fee except under certain conditions specified in the agreement.

Intellectual Property

We seek to protect our lead compounds, compound libraries, expressed proteins, synthetic organic processes, formulations, assays, cloned targets, screening technology and other technologies by filing, or by causing to be filed on our behalf, patent applications in the United States and abroad. Additionally, we have licensed from institutions the rights to issued United States patents, pending United States patent applications, and issued and pending foreign filings. We face the risk that one or more of the above patent applications may be denied. We also face the risk that issued patents that we own or license may be challenged or circumvented or may otherwise not provide protection for any commercially viable products we develop.

The technologies we use in our research, as well as the drug targets we select, may infringe the patents or violate the proprietary rights of third parties. If this occurs, we may be required to obtain licenses to patents or proprietary rights of others in order to continue with the commercialization of our products.

In addition to the granted and potential patent protection, the United States, the European Union and Japan all provide data and marketing exclusivity for new medicinal compounds. If this protection is available, no competitor may use the original applicant's data as the basis of a generic marketing application during the period of data and marketing exclusivity. This period of exclusivity is generally five years in the United States, six years in Japan and ten years in the European Union, measured from the date of FDA, or corresponding foreign, approval.

Elagolix, our small molecule GnRH antagonist currently in clinical trials for the treatment of endometriosis and uterine fibroids, is covered by six issued U.S. patents relating to composition of matter, pharmaceutical compositions, and methods of use. U.S. Patent Nos. 6,872,728, 7,179,815 and 7,462,625 are due to expire in 2021 (not including potential patent term extensions of up to five years) while U.S. Patent Nos. 7,056,927, 7,176,211 and 7,419,983 are due to expire in 2024 (not including potential patent term extensions of up to five years).

INGREZZA (valbenazine), our highly selective VMAT2 inhibitor, currently in clinical trials for the treatment of TD and Tourette syndrome, is covered by U.S. Patent No. 8,039,627 which expires in 2029 and U.S. Patent No. 8,357,697 which expires in 2027 (not including a potential patent term extension of up to five years). INGREZZA is also covered by European Patent No. 2,081,929 which expires in 2027.

Opicapone, a highly selective COMT inhibitor for Parkinson's disease is covered by U.S. Patent No. 8,168,793, among others, which expires in 2029 (not including a potential patent term extension of up to five years).

Manufacturing and Distribution

We currently rely on, and expect to continue to rely on, contract manufacturers to produce sufficient quantities of our product candidates for use in our preclinical and clinical trials. In addition, we intend to rely on third parties to manufacture any products that we may commercialize in the future. We believe this manufacturing strategy will enable us to direct our financial resources to our commercialization efforts without devoting the resources and capital required to build manufacturing facilities.

We have established an internal pharmaceutical development group to develop manufacturing methods for our product candidates, to optimize manufacturing processes, and to select and transfer these manufacturing technologies to our suppliers. In anticipation of the intended commercialization of INGREZZA, we have also established an internal commercial supply team to manage all aspects related to the INGREZZA commercial supply chain. We contract with multiple manufacturers to ensure adequate product supply and to mitigate risk.

There currently are a limited number of these manufacturers. Furthermore, some of the contract manufacturers that we have identified to date only have limited experience at manufacturing, formulating, analyzing and packaging our product candidates in quantities sufficient for conducting clinical trials or for commercialization.

Additionally, in anticipation of the intended commercialization of INGREZZA, we have retained third-party service providers to perform a variety of functions related to the distribution of INGREZZA, including shipping, warehousing, customer service, order-taking and processing, invoicing, collections, and other distribution related activities.

Marketing and Sales

We currently have limited experience in marketing or selling pharmaceutical products.

We have established our core commercial team that is preparing for the planned future launch of INGREZZA. This commercial team is comprised of experienced professionals in marketing, access and reimbursement, managed markets, marketing research, commercial operations, and sales force planning and management. During 2016, we hired a portion of our sales leadership team, including national and regional sales managers and health plan payor account managers. We have also hired our internal marketing, market research and commercial operations teams in anticipation of the INGREZZA launch.

We are preparing to build a specialty sales force in the United States of approximately 140 experienced sales professionals. If INGREZZA is approved for commercialization for the treatment of TD, this specialty sales force will focus on promotion to physicians who treat TD patients, primarily neurologists and psychiatrists.

In preparation for a planned commercial launch of INGREZZA, we have an ongoing TD disease education and awareness campaign that includes educational programs with health care professionals, a TD educational website and a strong presence at neurology and psychiatric medical meetings. We have also conducted foundational access and reimbursement research with formulary decision makers for health plan payors.

Government Regulation

Regulation by government authorities in the United States and foreign countries is a significant factor in the development, manufacture, distribution, marketing and sale of our proposed products and in our ongoing research and product development activities. All of our products will require regulatory approval by government agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical studies and clinical trials and other approval procedures of the FDA and similar regulatory authorities in foreign countries. The process of obtaining these approvals and the subsequent compliance with appropriate federal and state statutes and regulations require the expenditure of substantial time and financial resources. In the United States, various federal and state statutes and regulation also govern or influence testing, manufacturing, safety, labeling, storage, and record-keeping of human therapeutic products and their marketing. Recent federal legislation imposes additional obligations on pharmaceutical manufacturers regarding product tracking and tracing.

In addition, federal and state healthcare laws restrict business practices in the pharmaceutical industry. These laws include, without limitation, federal and state fraud and abuse laws, false claims laws, data privacy and security laws, as well as transparency laws regarding payments or other items of value provided to healthcare providers.

The federal Anti-Kickback Statute makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully, directly or indirectly, solicit, receive, offer, or pay any remuneration that is intended to induce the referral of business, including the purchase, order, lease of any good, facility, item or service for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. The term "remuneration" has been broadly interpreted to include anything of value.

Federal civil and criminal false claims laws, including the federal civil False Claims Act, and the federal civil monetary penalties law, which prohibit among other things, any person or entity from knowingly presenting, or causing to be presented, for payment to, or approval by, federal programs, including Medicare and Medicaid, claims for items or services, including drugs, that are false or fraudulent or not provided as claimed and knowingly making, or causing to be made, a false record or statement material to a false or fraudulent claim to avoid, decrease or conceal an obligation to pay money to the federal government.

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) created additional federal criminal statutes that prohibit among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

Also, many states have similar fraud and abuse statutes or regulations that may be broader in scope and may apply regardless of payor, in addition to items and services reimbursed under Medicaid and other state programs. Additionally, to the extent that our product is sold in a foreign country, we may be subject to similar foreign laws.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and their implementing regulations, requires certain types of individuals and entities to abide by standards relating to the privacy and security of individually identifiable health information, including the adoption of administrative, physical and technical safeguards to protect such information. In addition, certain state laws govern the privacy and security of health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

The federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services (CMS) information related to payments or other transfers of value made to physicians and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members.

Failure to comply with these laws, where applicable, can result in significant penalties, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgement, individual imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Preclinical studies generally are conducted in laboratory animals to evaluate the potential safety and efficacy of a product. Drug developers submit the results of preclinical studies to the FDA as a part of an IND application before clinical trials can begin in humans. Typically, clinical evaluation involves a time consuming and costly three-phase process.

- Phase I Clinical trials are conducted with a small number of subjects to determine the early safety profile, maximum tolerated dose and pharmacological properties of the product in human volunteers.
- Phase II Clinical trials are conducted with groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety.
- Phase III Large-scale, multi-center, comparative clinical trials are conducted with patients afflicted with a specific disease in order to determine safety and efficacy as primary support for regulatory approval by the FDA to market a product candidate for a specific disease.

The FDA closely monitors the progress of each of the three phases of clinical trials that are conducted in the United States and may, at its discretion, re-evaluate, alter, suspend or terminate the testing based upon the data accumulated to that point and the FDA's assessment of the risk/benefit ratio to the patient. To date, we have also conducted some of our clinical trials in Europe, Canada, Oceania and South Africa. Clinical trials conducted in foreign countries are also subject to oversight by regulatory authorities in those countries.

Once Phase III trials are completed, drug developers submit the results of preclinical studies and clinical trials to the FDA in the form of an NDA or a biologics license application for approval to commence commercial sales. In most cases, the submission of an NDA is subject to a substantial application user fee. Under the PDUFA guidelines that are currently in effect, the FDA has a goal of ten months from the date of filing of a standard NDA for a new molecular entity to review and act on the submission. This review typically takes twelve months from the date the NDA is submitted to FDA because the FDA has approximately two months to make a "filing" decision.

In addition, under the Pediatric Research Equity Act of 2003 (PREA) as amended and reauthorized, certain NDAs or supplements to an NDA must contain data that are adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers from the pediatric data requirements.

The FDA also may require submission of a risk evaluation and mitigation strategy (REMS) plan to ensure that the benefits of the drug outweigh its risks. The REMS plan could include medication guides, physician communication plans, assessment plans, and/or elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools.

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA reviews an NDA to determine, among other things, whether the drug is safe and effective and whether the facility in which it is manufactured, processed, packaged or held meets standards designed to assure the product's continued safety, quality and purity.

The FDA may refer an application for a novel drug to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with current Good Manufacturing Practice requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA may inspect one or more clinical trial sites to assure compliance with Good Clinical Practice requirements.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a complete response letter. A complete response letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing in order for FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Even if the FDA approves a product, it may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase IV clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution and use restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes, and additional labeling claims, are subject to further testing requirements and FDA review and approval.

We will also have to complete an approval process similar to that in the United States in virtually every foreign target market for our products in order to commercialize our product candidates in those countries. The approval procedure and the time required for approval vary from country to country and may involve additional testing. Foreign approvals may not be granted on a timely basis, or at all. In addition, regulatory approval of prices is required in most countries other than the United States. The resulting prices may not be sufficient to generate an acceptable return to us or our corporate collaborators.

Special FDA Expedited Review and Approval Programs

The FDA has various programs, including fast track designation, accelerated approval, priority review, and breakthrough therapy designation, which are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

To be eligible for a fast track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. The FDA may review sections of the NDA for a fast track product on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

The FDA may give a priority review designation to drugs that offer major advances in treatment, or provide a treatment where no adequate therapy exists. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months under current PDUFA guidelines. These

six and ten month review periods are measured from the filing date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review and decision from the date of submission. Most products that are eligible for fast track designation are also likely to be considered appropriate to receive a priority review.

In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may be eligible for accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require a sponsor of a drug receiving accelerated approval to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug may be subject to accelerated withdrawal procedures.

A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs designated as breakthrough therapies are also eligible for accelerated approval. The FDA must take certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

The FDA may impose a number of post-approval requirements as a condition of approval of an NDA. For example, the FDA may require post-marketing testing, including Phase IV clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with current Good Manufacturing Practices (cGMP) requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP requirements and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval, including for INGREZZA. In the United States and markets in other countries, sales of any products for which we receive regulatory approval will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for such drug products.

In the United States, third-party payors include federal and state healthcare programs, government authorities, private managed care providers, private health insurers and other organizations. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of medical drug products and medical services, in addition to questioning their safety and efficacy. Such payors may limit coverage to specific drug products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs for a particular indication. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Nonetheless, our product candidates, including INGREZZA, may not be considered medically necessary or cost-effective.

Moreover, the process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price of a drug product or for establishing the reimbursement rate that such a payor will pay for the drug product. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

The marketability of any product candidates for which we or our collaborators receive regulatory approval for commercial sale, including INGREZZA, may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party

reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

By way of example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, collectively the ACA, was signed into law, which intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the health industry and impose additional health policy reforms. Among the provisions of the ACA of importance to our potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for a manufacturer's outpatient drugs to be covered under Medicare Part D;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payor.

Some of the provisions of the ACA have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges, which we expect to continue in light of the change in administrations following the 2016 U.S. presidential election. Recently, the U.S. House of Representatives and

Senate passed legislation, which, if signed into law, would repeal certain aspects of the ACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of the ACA that are repealed. Thus, the full impact of the ACA on our business remains unclear.

Other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013 and will remain in effect through 2025 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA, which will be fully implemented in 2019. At this time it is unclear how the introduction of the Medicare quality payment program will impact overall physician reimbursement. Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products.

Competition

The biotechnology and pharmaceutical industries are subject to rapid and intense technological change. We face, and will continue to face, competition in the development and marketing of our product candidates from biotechnology and pharmaceutical companies, research institutions, government agencies and academic institutions. Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and
- new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive. We are performing research on or developing products for the treatment of several disorders including endometriosis, TD, uterine fibroids, Tourette syndrome, classic congenital adrenal hyperplasia, essential tremor, pain, and other neurological and endocrine-related diseases and disorders.

An NDA for our VMAT2 inhibitor, INGREZZA (valbenazine), has been filed with the FDA for TD and is also currently in Phase II development for Tourette syndrome. At present there are no approved drug therapies for TD; however, off-label treatment regimens consist of utilizing various atypical antipsychotic medications (e.g., clozapine), benzodiazepines (off-label) or botulinum toxin injections to treat the movements associated with TD. Generic neuroleptic medications (pimozide and haloperidol) as well as Abilify® (apripriazole) are approved by the FDA to control the tics associated with Tourette syndrome. Additionally, Teva Pharmaceuticals, Inc. is investigating a deuterium labeled VMAT2 inhibitor SD-809 (deutetrabenazine) for the treatment of TD and Tourette syndrome as well as for the chorea associated with Huntington's disease. Other potential indications for our VMAT2 inhibitor include the chorea associated with Huntington's disease, schizophrenia and tardive dystonia. Currently, Xenazine® (tetrabenazine), marketed by Lundbeck, as well as its generic alternatives, are approved for the chorea associated with Huntington's disease.

We, in conjunction with our partner AbbVie, are developing elagolix for the treatment of heavy menstrual bleeding associated with uterine fibroids. There are no current pharmaceutical therapies approved in the United States for the chronic treatment of uterine fibroids. Lupron Depot® is approved for short-term use to improve the outcome of uterine fibroid surgery. However, approximately 250,000 hysterectomies are performed annually in the United States as a direct result of uterine fibroids, as well as myomectomies (surgery) to remove the fibroids. Our oral small molecule pharmaceutical agent, elagolix, would compete directly with these current invasive standards of care. Additionally, Esmya® (ulipristal) by Allergan Pharmaceuticals, Inc. is being evaluated in Phase III clinical trials for potential use in the treatment of heavy menstrual bleeding associated with uterine fibroids with a planned NDA filing in 2017. Obseva has initiated a Phase IIb endometriosis study with its GnRH receptor antagonist OBE2109 and also intends to explore treating uterine fibroids patients with the same molecule. Myovant Sciences, Inc. has stated that it will be investigating its GnRH receptor antagonist, relugolix, in Phase III trials of endometriosis, uterine fibroids and prostate cancer patients.

Lupron Depot®, marketed by AbbVie, and Synarel® and depo-subQ provera104®, marketed by Pfizer, are products that have been approved for the treatment of endometriosis, infertility, and central precocious puberty. These drugs, and any generic alternatives, may compete with any small molecule non-peptide GnRH antagonists we, in conjunction with our collaborative partner AbbVie, develop for these indications. Approximately 130,000 hysterectomies are performed annually in the United States as a direct result of endometriosis, as well as a significant number of laparoscopic procedures to ablate endometrial explants. Our oral small molecule pharmaceutical agent, elagolix, would also compete directly with these current invasive standards of care.

Opicapone is a COMT inhibitor to be utilized as an adjunct therapy in the treatment of Parkinson's disease. COMT inhibitors prolong the duration of effect of levodopa which is the primary treatment option for Parkinson's disease patients. There are currently two FDA approved COMT inhibitors, COMTAN® (entacapone) originally developed by Orion Pharma and TASMAR® (tolcapone) originally developed by Hoffman-LaRoche Inc. Opicapone would compete directly with these two drugs and their generic equivalents.

NBI-640756 is currently in clinical trials for the treatment of essential tremor. Current pharmacological therapies utilized in the treatment of essential tremor include propranolol and primidone. Deep brain stimulation, an invasive procedure involving the implantation of electrodes within certain areas of the brain, is sometimes utilized for severe essential tremor. Additionally, Sage Therapeutics is conducting clinical trials for its GABA modulator SAGE-547 for essential tremor.

NBI-74788 is currently being investigated for the treatment of classic CAH, for which there are limited therapies. High doses of corticosteroids are the current standard of care to both correct the endogenous cortisol deficiency as well as reduce the excessive ACTH levels. However, the level of dose as well as the duration of steroid use required to suppress ACTH is well above the normal physiological level of cortisol; resulting in metabolic syndrome, bone loss, growth impairment, and Cushing's syndrome as common and serious side effects. Additionally, Millendo Therapeutics is conducting clinical trials with its ACAT1 inhibitor ATR-101 for classic CAH.

If one or more of these competitive products or programs are successful, it may reduce or eliminate the market for our products.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;

- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could harm our business, prospects, financial condition and results of operations, which could negatively affect our stock price.

Employees

As of December 31, 2016, we had 196 full-time employees. Of these full-time employees, 106 were engaged in, or directly support, research and development activities, 58 were primarily responsible for INGREZZA pre-commercialization activities and 32 were in general and administrative positions. None of our employees are represented by a collective bargaining arrangement, and we believe our relationship with our employees is good. In addition, we rely on a number of consultants to assist us.

Insurance

We maintain product liability insurance for our clinical trials. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for products in development. However, insurance coverage is becoming increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. In addition, we may not be able to obtain commercially reasonable product liability insurance for any products approved for marketing.

Available Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on our website at www.neurocrine.com, as soon as reasonably practicable after such reports are available on the Securities and Exchange Commission website at www.sec.gov.

Additionally, copies of our Annual Report will be made available, free of charge, upon written request.

ITEM 1A. RISK FACTORS

The following information sets forth risk factors that could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Annual Report on Form 10-K and those we may make from time to time. If any of the following risks actually occur, our business, operating results, prospects or financial condition could be harmed. Additional risks not presently known to us, or that we currently deem immaterial, may also affect our business operations.

Risks Related to Our Company

We have never obtained regulatory approval for a drug and we may be unable to obtain, or may be delayed in obtaining, regulatory approval for INGREZZA or any of our other product candidates.

We have never obtained regulatory approval for a drug. Securing U.S. Food and Drug Administration (FDA) approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each indication to establish the product candidate's safety and efficacy. It is possible that the FDA or foreign regulatory authorities may refuse to accept our New Drug Application (NDA) (or corresponding application) for substantive review or may conclude after review of our data that our application is insufficient to obtain regulatory approval of INGREZZA or any of our other product candidates. The process of obtaining these approvals and the subsequent compliance with federal and state statutes and regulations require spending substantial time and financial resources.

The FDA may choose not to approve our NDA for INGREZZA and instead issue a Complete Response Letter for any of a variety of reasons, including a decision related to the safety or efficacy data for INGREZZA or for any other issues that they may identify related to our development of INGREZZA for the treatment of TD.

Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Any regulatory approvals that we receive for INGREZZA or any of our other product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with current Good Manufacturing Practices for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- product injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of INGREZZA or any of our other product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Our clinical trials may fail to demonstrate the safety and efficacy of our product candidates, which could prevent or significantly delay their regulatory approval.

Before obtaining regulatory approval for the sale of any of our potential products, we must subject these product candidates to extensive preclinical and clinical testing to demonstrate their safety and efficacy for humans. Clinical trials are expensive, time-consuming and may take years to complete.

In connection with the clinical trials of our product candidates, we face the risks that:

- the FDA or similar foreign regulatory authority may not approve an Investigational New Drug (IND) Application or foreign equivalent filings required to initiate human clinical studies for our drug candidates or the FDA may require additional preclinical or clinical studies as a condition of the initiation of Phase I clinical studies, progression from Phase I to Phase II, or Phase II to Phase III, or for NDA approval;
- the product candidate may not prove to be effective or as effective as other competing product candidates;
- we may discover that a product candidate may cause harmful side effects or results of required toxicology studies may not be acceptable to the FDA;
- the results may not replicate the results of earlier, smaller trials;
- the FDA or similar foreign regulatory authorities may require use of new or experimental endpoints that may prove insensitive to treatment effects;
- we or the FDA or similar foreign regulatory authorities may suspend the trials;
- the results may not be statistically significant;
- patient recruitment may be slower than expected;
- patients may drop out of the trials; and
- regulatory requirements may change.

These risks and uncertainties impact all of our clinical programs. Specifically, our VMAT2 inhibitor program will be impacted if any of the events above lead to delayed timelines for the enrollment in, or completion of, clinical trials of INGREZZA for tardive dyskinesia or Tourette syndrome. Similarly, with respect to our gonadotropin-releasing hormone (GnRH) program with AbbVie Inc. (AbbVie), any of the clinical, regulatory or operational events described above could delay timelines for the completion of the Phase III endometriosis program or the Phase III uterine fibroids program. Additionally, any of these events described above could result in suspension of a program and/or obviate any filings for necessary regulatory approvals.

In addition, late stage clinical trials are often conducted with patients having the most advanced stages of disease. During the course of treatment, these patients can die or suffer other adverse medical effects for reasons that may not be related to the pharmaceutical agent being tested but which can nevertheless adversely affect clinical trial results. Any failure or substantial delay in completing clinical trials for our product candidates may severely harm our business.

Even if the clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our

product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

If we receive regulatory approval from the FDA for INGREZZA, we will depend on a single source supplier for each of the production of INGREZZA and its active pharmaceutical ingredients. The loss of either of these suppliers, or delays or problems in the supply of INGREZZA, could materially and adversely affect our ability to successfully commercialize INGREZZA.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of process controls required to consistently produce the active pharmaceutical ingredients and the finished product in sufficient quantities while meeting detailed product specifications on a repeated basis. Manufacturers of pharmaceutical products may encounter difficulties in production, including difficulties with production costs and yields, process controls, quality control and quality assurance, including testing of stability, impurities and impurity levels and other product specifications by validated test methods, and compliance with strictly enforced U.S., state and non-U.S. regulations. If we receive regulatory approval from the FDA for INGREZZA, and our third party suppliers for INGREZZA encounter these or any other manufacturing, quality or compliance difficulties, we may be unable to meet commercial demand for INGREZZA, which could materially and adversely affect our ability to successfully commercialize INGREZZA.

In addition, if we receive regulatory approval from the FDA for INGREZZA and our suppliers fail or refuse to supply us with INGREZZA or its active pharmaceutical ingredient for any reason; it would take a significant amount of time and expense to qualify a new supplier. The FDA and similar international regulatory bodies must approve manufacturers of the active and inactive pharmaceutical ingredients and certain packaging materials used in pharmaceutical products. The loss of a supplier could require us to obtain regulatory clearance and to incur validation and other costs associated with the transfer of the active pharmaceutical ingredients or product manufacturing processes. If there are delays in qualifying new suppliers or facilities or a new supplier is unable to meet FDA or similar international regulatory body's requirements for approval, there could be a shortage of INGREZZA.

We have limited marketing experience and no sales force, and have only recently begun establishing our distribution and reimbursement capabilities, and if our products are approved, we may not be able to commercialize them successfully.

Although we do not currently have any marketable products, our ability to produce revenues ultimately depends on our ability to sell our products and secure adequate third-party reimbursement if and when they are approved by the FDA. We currently have limited experience in marketing and selling pharmaceutical products, have no sales force established to sell pharmaceutical products and have only recently begun establishing our distribution and reimbursement capabilities, all of which will be necessary to successfully commercialize any product candidate approved by the FDA. While we have recently hired personnel and engaged consultants with experience marketing and selling pharmaceutical products, there can be no guarantee that we will be able to establish the personnel, systems, arrangements and capabilities necessary to successfully commercialize any product candidate approved by the FDA. If we fail to establish successful marketing, sales and reimbursement capabilities or fail to enter into successful marketing arrangements with third parties, our product revenues may suffer.

We have no manufacturing capabilities. If third-party manufacturers of our product candidates fail to devote sufficient time and resources to our concerns, or if their performance is substandard, our clinical trials and product introductions may be delayed and our costs may rise.

We have in the past utilized, and intend to continue to utilize, third-party manufacturers to produce the drug compounds we use in our clinical trials and for the potential commercialization of our future products, including

INGREZZA. We have limited experience in manufacturing products for commercial purposes and do not currently have any manufacturing facilities. Consequently, we depend on, and will continue to depend on, several contract manufacturers for all production of products for development and commercial purposes. If we are unable to obtain or retain third-party manufacturers, we will not be able to develop or commercialize our products. The manufacture of our products for clinical trials and commercial purposes is subject to specific FDA regulations, including current Good Manufacturing Practice regulations. Our third-party manufacturers might not comply with FDA regulations relating to manufacturing our products for clinical trials and commercial purposes or other regulatory requirements now or in the future. Our reliance on contract manufacturers also exposes us to the following risks:

- contract manufacturers may encounter difficulties in achieving volume production, quality control and quality assurance, and also may experience shortages in qualified personnel. As a result, our contract manufacturers might not be able to meet our clinical schedules or adequately manufacture our products in commercial quantities when required;
- switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all;
- our contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store or distribute our products; and
- drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the U.S. Drug Enforcement Administration, and other agencies to ensure strict compliance with current Good Manufacturing Practices and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

Our current dependence upon third parties for the manufacture of our products may reduce our profit margin, if any, on the sale of our future products and our ability to develop and deliver products on a timely and competitive basis.

We depend on our current collaborators for the development and commercialization of our product candidates that we out-license and in-license, and may need to enter into future collaborations to develop and commercialize certain of our product candidates.

Our strategy for fully developing and commercializing elagolix is dependent upon maintaining our current collaboration agreement with AbbVie. This collaboration agreement provides for significant future payments should certain development, regulatory and commercial milestones be achieved, and royalties on future sales of elagolix. Under this agreement, AbbVie is responsible for, among other things, conducting clinical trials and obtaining required regulatory approvals for elagolix; as well as manufacturing and commercialization of elagolix in the event it receives regulatory approval.

Because of our reliance on AbbVie, the development and commercialization of elagolix could be substantially delayed, and our ability to receive future funding could be substantially impaired, if AbbVie:

- failed to gain the requisite regulatory approval of elagolix;
- did not successfully launch and commercialize elagolix;
- did not conduct its collaborative activities in a timely manner;
- did not devote sufficient time and resources to our partnered program;
- terminated its agreement with us;
- developed, either alone or with others, products that may compete with elagolix;

- disputed our respective allocations of rights to any products or technology developed during our collaboration; or
- merged with a third party that wants to terminate our agreement.

In March 2015, we entered into a collaboration and license agreement with Mitsubishi Tanabe to develop and commercialize INGREZZA in Japan and other select Asian markets. We will rely on Mitsubishi Tanabe to achieve certain development, regulatory and commercial milestones which, if achieved, could generate significant future revenue for us. Our collaboration with Mitsubishi Tanabe is subject to risks and uncertainties similar to those described above. In addition, we may need to enter into other out-licensing collaborations to assist in the development and commercialization of other product candidates we are developing now or may develop in the future, and any such future collaborations would be subject to similar risks and uncertainties.

In February 2017, we entered into a license agreement with BIAL for the development and commercialization of opicapone for the treatment of human diseases and conditions, including Parkinson's disease, in the United States and Canada. Under the terms of the agreement, we are responsible for the management of all opicapone development and commercialization activities; however, we will depend on BIAL to supply all drug product and investigation medicinal product for our development and commercialization activities. In addition, pursuant to the license agreement, the parties have established a joint steering committee with overall coordination and strategic oversight over activities under the agreement and to provide a forum for regular exchange of information, and BIAL has the right to co-promote licensed products during certain periods of time and to engage in certain marketing-related activities in cooperation with us. Accordingly, our strategy for developing and commercializing opicapone is dependent upon maintaining our current collaboration with BIAL. Because of our reliance on BIAL for certain aspects related to the development and commercialization of opicapone, any disagreement with BIAL, or BIAL's decision to not devote sufficient time and resources to our collaboration or to not conduct activities in a timely manner, could substantially delay and/or prohibit our ability to develop and commercialize opicapone.

These issues and possible disagreements with AbbVie, Mitsubishi Tanabe, BIAL or any future corporate collaborators could lead to delays in the collaborative research, development or commercialization of our product candidates. Furthermore, disagreements with these parties could require or result in litigation or arbitration, which would be time-consuming and expensive. If any of these issues arise, it may delay the development and commercialization of drug candidates and, ultimately, our generation of product revenues.

Because the development of our product candidates is subject to a substantial degree of technological uncertainty, we may not succeed in developing any of our product candidates.

All of our product candidates are currently in research or clinical development with the exception of INGREZZA which is also in registration for TD. Only a small number of research and development programs ultimately result in commercially successful drugs. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. These reasons include the possibilities that the potential products may:

- be found ineffective or cause harmful side effects during preclinical studies or clinical trials;
- fail to receive necessary regulatory approvals on a timely basis or at all;
- be precluded from commercialization by proprietary rights of third parties;
- be difficult to manufacture on a large scale; or
- be uneconomical to commercialize or fail to achieve market acceptance.

If any of our products encounters any of these potential problems, we may never successfully market that product.

We do not and will not have access to all information regarding the product candidates we licensed to AbbVie.

We do not and will not have access to all information regarding the products being developed and potentially commercialized by AbbVie, including potentially material information about clinical trial design and execution, safety reports from clinical trials, spontaneous safety reports if a product candidate is later approved and marketed, regulatory affairs, process development, manufacturing, marketing and other areas known by AbbVie. In addition, we have confidentiality obligations under our agreement with AbbVie. Thus, our ability to keep our shareholders informed about the status of product candidates under our collaboration with AbbVie will be limited by the degree to which AbbVie keeps us informed and allows us to disclose such information to the public. If AbbVie fails to keep us informed about the clinical development and regulatory approval of our collaboration and product candidates licensed to it, we may make operational and investment decisions that we would not have made had we been fully informed, which may materially and adversely affect our business and operations.

We have a history of losses and expect to incur negative operating cash flows for the foreseeable future, and we may never achieve sustained profitability.

Since our inception, we have incurred significant net losses and negative cash flow from operations. As a result of historical operating losses, we had an accumulated deficit of approximately \$1.1 billion as of December 31, 2016. We do not expect to be profitable, or generate positive cash flows from operations, for the year ending December 31, 2017.

We have not yet obtained regulatory approvals of any products and, consequently, have not generated revenues from the sale of products. Even if we succeed in developing and commercializing one or more of our drugs, we may not be profitable. We also expect to continue to incur significant operating and capital expenditures as we:

- seek regulatory approvals for our product candidates;
- develop, formulate, manufacture and commercialize our product candidates;
- in-license or acquire new product development opportunities;
- implement additional internal systems and infrastructure; and
- hire additional clinical, scientific, sales and marketing personnel.

We expect to experience negative cash flow in the coming years as we fund our operations, in-licensing or acquisition opportunities, and capital expenditures. We will need to generate significant revenues to achieve and maintain profitability and positive cash flow on an annual basis. We may not be able to generate these revenues, and we may never achieve profitability on an annual basis in the future. Our failure to achieve or maintain profitability on an annual basis could negatively impact the market price of our common stock. Even if we become profitable on an annual basis, we cannot assure you that we would be able to sustain or increase profitability on an annual basis.

The price of our common stock is volatile.

The market prices for securities of biotechnology and pharmaceutical companies historically have been highly volatile, and the market for these securities has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Over the course of the last 12 months, the price of our common stock has ranged from approximately \$31.00 per share to approximately \$56.00 per share. The market price of our common stock may fluctuate in response to many factors, including:

- the results of the FDA's review of our INGREZZA NDA for tardive dyskinesia;
- the results of our clinical trials;

- developments concerning new and existing collaboration agreements;
- announcements of technological innovations or new therapeutic products by us or others;
- general economic and market conditions, including economic and market conditions affecting the biotechnology industry;
- developments in patent or other proprietary rights;
- developments related to the FDA;
- future sales of our common stock by us or our stockholders;
- comments by securities analysts;
- fluctuations in our operating results;
- developments related to on-going litigation;
- government regulation;
- health care reimbursement;
- failure of any of our product candidates, if approved, to achieve commercial success; and
- public concern as to the safety of our drugs.

Because our operating results may vary significantly in future periods, our stock price may decline.

Our quarterly revenues, expenses and operating results have fluctuated in the past and are likely to fluctuate significantly in the future. Our revenues are unpredictable and may fluctuate, among other reasons, due to our achievement of product development objectives and milestones, clinical trial enrollment and expenses, research and development expenses and the timing and nature of contract manufacturing and contract research payments. In addition, if we receive regulatory approval from the FDA for INGREZZA or any of our other product candidates, our revenues will fluctuate depending on our ability to sell our products and secure adequate third-party reimbursement. A high portion of our costs are predetermined on an annual basis, due in part to our significant research and development costs. Thus, small declines in revenue could disproportionately affect operating results in a quarter. Because of these factors, our operating results in one or more future quarters may fail to meet the expectations of securities analysts or investors, which could cause our stock price to decline.

We license some of our core technologies and drug candidates from third parties. If we default on any of our obligations under those licenses, or violate the terms of these licenses, we could lose our rights to those technologies and drug candidates or be forced to pay damages.

We are dependent on licenses from third parties for some of our key technologies. These licenses typically subject us to various commercialization, reporting and other obligations. If we fail to comply with these obligations, we could lose important rights. If we were to default on our obligations under any of our licenses, we could lose some or all of our rights to develop, market and sell products covered by these licenses. For example, BIAL may terminate our license agreement, pursuant to which we have rights to develop and commercialize opicapone, if we fail to use commercially reasonable efforts, fail to file an NDA for a licensed product by a specified date, or otherwise breach the license agreement. In addition, if we were to violate any of the terms of our licenses, we could become subject to damages. For example, on December 1, 2015, The Mount Sinai School of Medicine of the City University of New York (Mount Sinai) filed a complaint against us, seeking unspecified monetary damages, future sublicensing fees and attorney's fees, alleging that we violated the terms of our license with Mount Sinai by inappropriately sublicensing Mount Sinai technology to AbbVie. While we believe that we have meritorious defenses to the claims made in the complaint and intend to vigorously defend ourselves against such claims, we are not able to predict the ultimate outcome of this action. Likewise, if we were to lose our rights under a license to use proprietary research tools, it could adversely affect our existing collaborations or adversely

affect our ability to form new collaborations. We also face the risk that our licensors could, for a number of reasons, lose patent protection or lose their rights to the technologies we have licensed, thereby impairing or extinguishing our rights under our licenses with them.

The independent clinical investigators and contract research organizations that we rely upon to conduct our clinical trials may not be diligent, careful or timely, and may make mistakes, in the conduct of our trials.

We depend on independent clinical investigators and contract research organizations (CROs) to conduct our clinical trials under their agreements with us. The investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. If our independent investigators fail to devote sufficient time and resources to our drug development programs, or if their performance is substandard, or not in compliance with Good Clinical Practices, it may delay or prevent the approval of our FDA applications and our introduction of new drugs. The CROs we contract with for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Failure of the CROs to meet their obligations could adversely affect clinical development of our products. Moreover, these independent investigators and CROs may also have relationships with other commercial entities, some of which may compete with us. If independent investigators and CROs assist our competitors at our expense, it could harm our competitive position.

If we cannot raise additional funding, we may be unable to complete development of our product candidates or establish commercial capabilities in the future.

We may require additional funding to continue our research and product development programs, to conduct preclinical studies and clinical trials, for operating expenses and to pursue regulatory approvals for product candidates, for the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims, if any, product in-licensing and any possible acquisitions, and we may require additional funding to establish manufacturing, marketing and commercialization capabilities in the future. We believe that our existing capital resources, together with investment income, and future payments due under our strategic alliances, will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, these resources might be insufficient to conduct research and development programs to the full extent currently planned. If we cannot obtain adequate funds, we may be required to curtail significantly one or more of our research and development programs or obtain funds through additional arrangements with corporate collaborators or others that may require us to relinquish rights to some of our technologies or product candidates.

Our future capital requirements will depend on many factors, including:

- continued scientific progress in our research and development programs;
- the magnitude and complexity of our research and development programs;
- progress with preclinical testing and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in filing and pursuing patent applications, enforcing patent claims, or engaging in interference proceedings or other patent litigation;
- competing technological and market developments;
- the establishment of additional strategic alliances;
- developments related to on-going litigation;
- the cost of commercialization activities and arrangements, including manufacturing of our product candidates; and
- the cost of product in-licensing and any possible acquisitions.

We intend to seek additional funding through strategic alliances, and may seek additional funding through public or private sales of our securities, including equity securities. For example, for so long as we continue to satisfy the requirements to be deemed a well-known seasoned issuer, we can file a shelf registration statement with the Securities and Exchange Commission (SEC), which will become automatically effective and will allow us to issue an unlimited number of shares of our common stock from time to time. In addition, we have previously financed capital purchases and may continue to pursue opportunities to obtain additional debt financing in the future. Additional equity or debt financing might not be available on reasonable terms, if at all. Any additional equity financings will be dilutive to our stockholders and any additional debt financings may involve operating covenants that restrict our business.

If we are unable to retain and recruit qualified scientists or if any of our key senior executives discontinues his or her employment with us, it may delay our development efforts or our preparations for the commercialization of INGREZZA or any other product candidate approved by the FDA.

We are highly dependent on the principal members of our management and scientific staff. The loss of any of these people could impede the achievement of our objectives, including the successful commercialization of INGREZZA or any other product candidate approved by the FDA. Furthermore, recruiting and retaining qualified scientific personnel to perform research and development work in the future, along with personnel with experience marketing and selling pharmaceutical products, is critical to our success. We may be unable to attract and retain personnel on acceptable terms given the competition among biotechnology, pharmaceutical and health care companies, universities and non-profit research institutions for experienced scientists and individuals with experience marketing and selling pharmaceutical products. In addition, we rely on a significant number of consultants to assist us in formulating our research and development strategy and our commercialization strategy. Our consultants may have commitments to, or advisory or consulting agreements with, other entities that may limit their availability to us.

We may be subject to claims that we or our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is commonplace in the biotechnology industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Governmental and third-party payors may impose sales and pharmaceutical pricing controls on our products or limit coverage and/or reimbursement for our products that could limit our product revenues and delay sustained profitability.

Our ability to commercialize any products successfully, including INGREZZA, will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available. The continuing efforts of government and third-party payors to contain or reduce the costs of health care through various means may reduce our potential revenues. These payors' efforts could decrease the price that we receive for any products we may develop and sell in the future.

Assuming we obtain coverage for a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of our products. Coverage decisions may depend upon clinical and economic standards that disfavor new

drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available regardless of whether they are approved by the FDA for that particular use.

Government authorities and other third-party payors are developing increasingly sophisticated methods of controlling healthcare costs, such as by limiting coverage and the amount of reimbursement for particular medications. Further, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. In addition, communications from government officials regarding health care costs and pharmaceutical pricing could have a negative impact on our stock price, even if such communications do not ultimately impact coverage or reimbursement decisions for our products.

There may also be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

If physicians and patients do not accept INGREZZA or any of our other products, we may not recover our investment.

The commercial success of INGREZZA or any of our other products, if they are approved for marketing, will depend upon the acceptance of those products as safe and effective by the medical community and patients.

The market acceptance of INGREZZA or any of our other products could be affected by a number of factors, including:

- the timing of receipt of marketing approvals;
- the safety and efficacy of the products;
- the availability of coverage and adequate reimbursement for the products;
- the success of existing products addressing our target markets or the emergence of equivalent or superior products; and
- the cost-effectiveness of the products.

In addition, market acceptance depends on the effectiveness of our marketing strategy, and, to date, we have very limited sales and marketing experience or capabilities. If the medical community and patients do not ultimately accept our products as being safe, effective, superior and/or cost-effective, we may not recover our investment.

If we receive regulatory approval from the FDA for INGREZZA or any of our other product candidates, we could face liability if a regulatory authority determines that we are promoting any such product for “off-label” uses.

A company may not promote “off-label” uses for its drug products. An off-label use is the use of a product for an indication that is not described in the product’s FDA-approved label in the United States or for uses in

other jurisdictions that differ from those approved by the applicable regulatory agencies. Physicians, on the other hand, may prescribe products for off-label uses. Although the FDA and other regulatory agencies do not regulate a physician's choice of drug treatment made in the physician's independent medical judgment, they do restrict promotional communications from companies or their sales force with respect to off-label uses of products for which marketing clearance has not been issued. A company that is found to have promoted off-label use of its product, including INGREZZA, may be subject to significant liability, including civil and criminal sanctions. If we begin marketing any of our product candidates, we intend to comply with the requirements and restrictions of the FDA and other regulatory agencies with respect to our promotion of our products, but we cannot be sure that the FDA or other regulatory agencies will agree that we have not violated their restrictions. As a result, we may be subject to criminal and civil liability. In addition, our management's attention could be diverted to handle any such alleged violations. A significant number of companies have been the target of inquiries and investigations by various U.S. federal and state regulatory, investigative, prosecutorial and administrative entities in connection with the promotion of products for unapproved uses and other sales practices, including the Department of Justice and various U.S. Attorneys' Offices, the Office of Inspector General of the Department of Health and Human Services, the FDA, the Federal Trade Commission and various state Attorneys General offices. These investigations have alleged violations of various U.S. federal and state laws and regulations, including claims asserting antitrust violations, violations of the federal False Claims Act, the Prescription Drug Marketing Act, anti-kickback laws, and other alleged violations in connection with the promotion of products for unapproved uses, pricing and Medicare and/or Medicaid reimbursement. If the FDA or any other governmental agency initiates an enforcement action against us or if we are the subject of a *qui tam* suit and it is determined that we violated prohibitions relating to the promotion of products for unapproved uses, we could be subject to substantial civil or criminal fines or damage awards and other sanctions such as consent decrees and corporate integrity agreements pursuant to which our activities would be subject to ongoing scrutiny and monitoring to ensure compliance with applicable laws and regulations. Any such fines, awards or other sanctions would have an adverse effect on our revenue, business, financial prospects, and reputation.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, new SEC regulations and NASDAQ rules, are creating uncertainty for companies such as ours. These laws, regulations and standards are subject to varying interpretations in some cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, our efforts to comply with evolving laws, regulations and standards have resulted in, and are likely to continue to result in, increased general and administrative expenses and management time related to compliance activities. If we fail to comply with these laws, regulations and standards, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our common stock.

Risks Related to Our Industry

Health care reform measures and other recent legislative initiatives could adversely affect our business.

The business and financial condition of pharmaceutical and biotechnology companies are affected by the efforts of governmental and third-party payors to contain or reduce the costs of health care. In the United States, comprehensive health care reform legislation was enacted by the Federal government and we expect that there will continue to be a number of federal and state proposals to implement government control over the pricing of prescription pharmaceuticals. In addition, increasing emphasis on reducing the cost of health care in the

United States will continue to put pressure on the rate of adoption and pricing of prescription pharmaceuticals. Moreover, in some foreign jurisdictions, pricing of prescription pharmaceuticals is already subject to government control. Additionally, other recent federal and state legislation imposes new obligations on manufacturers of pharmaceutical products, among others, related to product tracking and tracing. Among the requirements of this new legislation, manufacturers are required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding distribution of the drug product. Further, under this new legislation, manufacturers will have drug product investigation, quarantine, disposition, notification and purchaser license verification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

Additionally, in March 2010, the ACA was signed into law, which was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the health industry and impose additional health policy reforms. Among the provisions of the ACA of importance to our potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for a manufacturer's outpatient drugs to be covered under Medicare Part D;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Some of the provisions of the ACA have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges, which we expect to continue in light of the pending change in administrations following the 2016 U.S. presidential election. Recently, the U.S. House of Representatives and Senate passed legislation, which, if signed into law, would repeal certain aspects of the ACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of the ACA that are repealed. Thus, the full impact of the ACA on our business remains unclear.

Other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013 and will remain in effect through 2025 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA, which will be fully implemented in 2019. At this time it is unclear how the introduction of the Medicare quality payment program will impact overall physician reimbursement. Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs.

We are currently unable to predict what additional legislation or regulation, if any, relating to the health care industry may be enacted in the future or what effect recently enacted Federal legislation or any such additional legislation or regulation would have on our business. The pendency or approval of such proposals or reforms could result in a decrease in our stock price or limit our ability to raise capital or to enter into collaboration agreements for the further development and commercialization of our programs and products.

We face intense competition, and if we are unable to compete effectively, the demand for our products, if any, may be reduced.

The biotechnology and pharmaceutical industries are subject to rapid and intense technological change. We face, and will continue to face, competition in the development and marketing of our product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies.

Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and
- new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive.

We are performing research on or developing products for the treatment of several disorders including endometriosis, tardive dyskinesia, uterine fibroids, Tourette syndrome, essential tremor, classic congenital adrenal hyperplasia, pain, and other neurological and endocrine-related diseases and disorders, and there are a number of competitors to products in our research pipeline. If one or more of our competitors' products or programs are successful, the market for our products may be reduced or eliminated.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing, marketing and distribution experience; and
- production facilities.

If we are unable to protect our intellectual property, our competitors could develop and market products based on our discoveries, which may reduce demand for our products.

Our success will depend on our ability to, among other things:

- obtain patent protection for our products;
- preserve our trade secrets;
- prevent third parties from infringing upon our proprietary rights; and
- operate without infringing upon the proprietary rights of others, both in the United States and internationally.

Because of the substantial length of time and expense associated with bringing new products through the development and regulatory approval processes in order to reach the marketplace, the pharmaceutical industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Accordingly, we intend to seek patent protection for our proprietary technology and compounds. However, we face the risk that we may not obtain any of these patents and that the breadth of claims we obtain, if any, may not provide adequate protection of our proprietary technology or compounds.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, through confidentiality agreements with our commercial collaborators, employees and consultants. We also have invention or patent assignment agreements with our employees and some, but not all, of our commercial collaborators and consultants. However, if our employees, commercial collaborators or consultants breach these agreements, we may not have adequate remedies for any such breach, and our trade secrets may otherwise become known or independently discovered by our competitors.

In addition, although we own a number of patents, the issuance of a patent is not conclusive as to its validity or enforceability, and third parties may challenge the validity or enforceability of our patents. We cannot assure you how much protection, if any, will be given to our patents if we attempt to enforce them and they are challenged in court or in other proceedings. It is possible that a competitor may successfully challenge our patents or that challenges will result in limitations of their coverage. Moreover, competitors may infringe our patents or successfully avoid them through design innovation. To prevent infringement or unauthorized use, we may need to file infringement claims, which are expensive and time-consuming. In addition, in an infringement proceeding a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover its technology. Interference proceedings declared by the United States Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications or those of our licensors. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and be a distraction to management. We cannot assure you that we will be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

The technologies we use in our research as well as the drug targets we select may infringe the patents or violate the proprietary rights of third parties.

We cannot assure you that third parties will not assert patent or other intellectual property infringement claims against us or our collaborators with respect to technologies used in potential products. If a patent infringement suit were brought against us or our collaborators, we or our collaborators could be forced to stop or delay developing, manufacturing or selling potential products that are claimed to infringe a third party's intellectual property unless that party grants us or our collaborators rights to use its intellectual property. In such cases, we could be required to obtain licenses to patents or proprietary rights of others in order to continue to commercialize our products. However, we may not be able to obtain any licenses required under any patents or proprietary rights of third parties on acceptable terms, or at all. Even if our collaborators or we were able to obtain rights to the third party's intellectual property, these rights may be non-exclusive, thereby giving our competitors access to the same intellectual property. Ultimately, we may be unable to commercialize some of our potential products or may have to cease some of our business operations as a result of patent infringement claims, which could severely harm our business.

Our employees, independent contractors, principal investigators, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees and independent contractors, such as principal investigators, consultants, commercial partners and vendors, or by employees of our commercial partners could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws, to report financial information or data accurately, to maintain the confidentiality of our trade secrets or the trade secrets of our commercial partners, or to disclose unauthorized activities to us. In particular, sales, marketing and other business arrangements in the healthcare industry are subject to extensive laws intended to prevent fraud, kickbacks, self-dealing and other abusive practices. Employee and independent contractor misconduct could also involve the improper use of individually identifiable information, including, without limitation, information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation.

Any relationships with healthcare professionals, principal investigators, consultants, customers (actual and potential) and third-party payors in connection with our current and future business activities are and will continue to be subject, directly or indirectly, to federal and state healthcare laws. If we are unable to comply, or have not fully complied, with such laws, we could face penalties, contractual damages, reputational harm, diminished profits and future earnings and curtailment or restructuring of our operations.

Our business operations and activities may be directly, or indirectly, subject to various federal and state healthcare laws, including without limitation, fraud and abuse laws, false claims laws, data privacy and security laws, as well as transparency laws regarding payments or other items of value provided to healthcare providers. These laws may restrict or prohibit a wide range of business activities, including, but not limited to, research, manufacturing, distribution, pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. These laws may impact, among other things, our current activities with principal investigators and research subjects, as well as proposed and future sales, marketing and education programs.

Such laws include:

- the federal Anti-Kickback Statute which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;

- the federal civil and criminal false claims, including the civil False Claims Act, and civil monetary penalties laws, which impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, which also imposes obligations, including mandatory contractual terms, on certain types of individuals and entities, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program, with specific exceptions, to report annually to CMS information related to payments or other transfers of value made to physicians and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third party payors, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws. If our operations or activities are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to, without limitation, civil, criminal and administrative penalties, damages, monetary fines, disgorgement, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate.

In addition, any sales of our product candidates once commercialized outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

We face potential product liability exposure far in excess of our limited insurance coverage.

The use of any of our potential products in clinical trials, and the sale of any approved products, may expose us to liability claims. These claims might be made directly by consumers, health care providers, pharmaceutical companies or others selling our products. We have obtained limited product liability insurance coverage for our clinical trials in the amount of \$10 million per occurrence and \$10 million in the aggregate. However, our insurance may not reimburse us or may not be sufficient to reimburse us for any expenses or losses we may

suffer. Moreover, insurance coverage is becoming increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. On occasion, juries have awarded large judgments in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us would decrease our cash reserves and could cause our stock price to fall.

Our activities involve hazardous materials, and we may be liable for any resulting contamination or injuries.

Our research activities involve the controlled use of hazardous materials. We cannot eliminate the risk of accidental contamination or injury from these materials. If an accident occurs, a court may hold us liable for any resulting damages, which may harm our results of operations and cause us to use a substantial portion of our cash reserves, which would force us to seek additional financing.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store confidential and sensitive information on our networks and in our data centers. This information includes, among other things, our intellectual property and proprietary information, the confidential information of our collaborators and licensees, and the personally identifiable information of our employees. It is important to our operations and business strategy that this information remains secure and is perceived to be secure. Despite security measures, however, our information technology and network infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance, or other disruptions. Any such attack or breach could compromise our networks and data centers and the information stored there could be accessed, publicly disclosed, lost, or stolen. Any such access, disclosure, or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, delays and impediments to our discovery and development efforts, and damage to our reputation.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease our corporate headquarters which consists of approximately 140,000 square feet of laboratory and office space located at 12780 El Camino Real in San Diego, California. The lease expires in December 2019; however we have options to extend the term of the lease for up to two consecutive ten year periods.

We believe that our property and equipment are generally well maintained and in good operating condition.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under Note 7 “Commitments and Contingencies” to our consolidated financial statements included in Part II, Item 8 of our Annual Report on Form 10-K is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. *MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES*

Our common stock is traded on the NASDAQ Global Select Market under the symbol "NBIX." The following table sets forth for the periods indicated the high and low sale price for our common stock. These prices do not include retail markups, markdowns or commissions.

	<u>High</u>	<u>Low</u>
Year Ended December 31, 2015		
1st Quarter	\$45.36	\$19.68
2nd Quarter	49.49	32.67
3rd Quarter	56.97	33.61
4th Quarter	58.46	37.76
Year Ended December 31, 2016		
1st Quarter	\$55.94	\$31.25
2nd Quarter	53.00	39.01
3rd Quarter	55.15	44.69
4th Quarter	54.91	37.35

As of February 1, 2017, there were approximately 53 stockholders of record of our common stock. We have not paid any cash dividends on our common stock since inception and do not anticipate paying cash dividends in the foreseeable future.

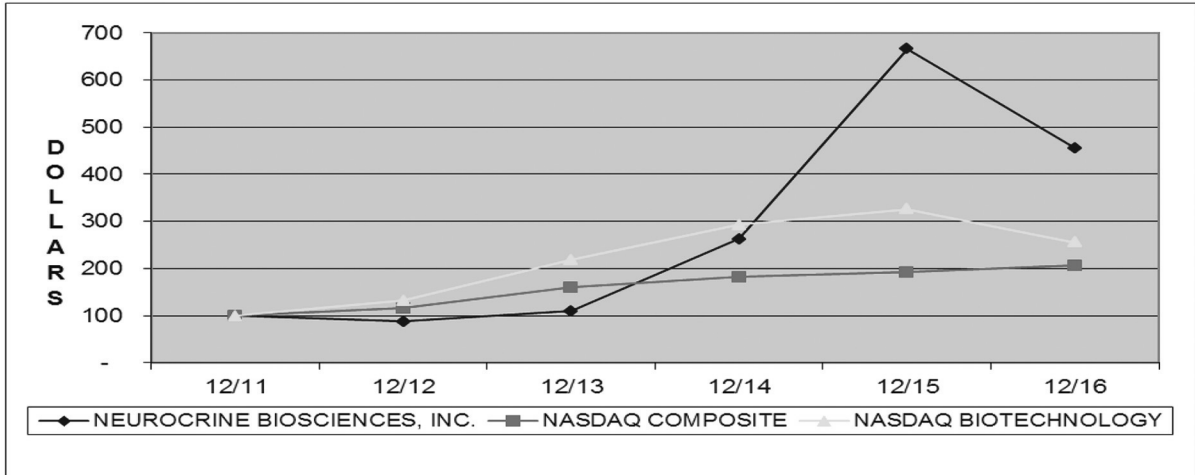
Information about our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report on Form 10-K.

Recent Sales of Unregistered Securities

There were no unregistered sales of equity securities during fiscal 2016.

Stock Performance Graph and Cumulative Total Return*

The graph below shows the cumulative total stockholder return assuming the investment of \$100 on December 31, 2011 (and the reinvestment of dividends thereafter) in each of (i) Neurocrine Biosciences, Inc.'s common stock, (ii) the NASDAQ Composite Index and (iii) the NASDAQ Biotechnology Index. The comparisons in the graph below are based upon historical data and are not indicative of, or intended to forecast, future performance of our common stock or Indexes.



* The material in this section is not “soliciting material”, is not deemed “filed” with the SEC and is not to be incorporated by reference into any of our SEC filings whether made before or after the date hereof and irrespective of any general incorporation language in any such SEC filing except to the extent we specifically incorporate this section by reference.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data have been derived from our audited financial statements. The information set forth below is not necessarily indicative of our results of future operations and should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements and notes thereto appearing elsewhere in this Annual Report on Form 10-K.

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
	(In thousands, except for net (loss) income per share data)				
STATEMENT OF COMPREHENSIVE (LOSS) INCOME DATA					
Revenues:					
Sponsored research and development	\$ —	\$ —	\$ —	\$ —	\$ 18,897
Milestones and license fees	15,000	19,769	—	2,919	34,243
Total revenues	<u>15,000</u>	<u>19,769</u>	<u>—</u>	<u>2,919</u>	<u>53,140</u>
Operating expenses:					
Research and development	94,291	81,491	46,425	39,248	37,163
General and administrative	68,081	32,480	17,986	13,349	13,437
Cease-use expense	—	—	—	—	1,092
Total operating expenses	<u>162,372</u>	<u>113,971</u>	<u>64,411</u>	<u>52,597</u>	<u>51,692</u>
(Loss) income from operations	(147,372)	(94,202)	(64,411)	(49,678)	1,448
Other income:					
Gain on sale/disposal of assets	3,431	3,334	3,222	3,170	3,074
Other income, net	2,851	1,939	647	418	503
Total other income, net	<u>6,282</u>	<u>5,273</u>	<u>3,869</u>	<u>3,588</u>	<u>3,577</u>
Net (loss) income	<u>\$ (141,090)</u>	<u>\$ (88,929)</u>	<u>\$ (60,542)</u>	<u>\$ (46,090)</u>	<u>\$ 5,025</u>
Net (loss) income per common share:					
Basic	\$ (1.63)	\$ (1.05)	\$ (0.81)	\$ (0.69)	\$ 0.08
Diluted	\$ (1.63)	\$ (1.05)	\$ (0.81)	\$ (0.69)	\$ 0.08
Shares used in calculation of net (loss) income per common share:					
Basic	86,713	84,496	74,577	66,989	65,619
Diluted	86,713	84,496	74,577	66,989	66,946
BALANCE SHEET DATA					
Cash, cash equivalents and investments	\$ 350,840	\$ 461,679	\$ 231,301	\$ 145,739	\$ 173,493
Working capital	280,028	358,359	182,539	136,763	173,618
Total assets	365,086	474,785	243,033	154,676	195,979
Long-term debt	—	—	—	—	—
Accumulated deficit	(1,056,324)	(915,234)	(826,305)	(765,763)	(719,673)
Total stockholders’ equity	314,877	424,454	208,699	120,410	154,372

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations section contains forward-looking statements pertaining to, among other things, the commercialization of our product candidates, the expected continuation of our collaborative agreements, the receipt of research and development payments thereunder, the future achievement of various milestones in product development and the receipt of payments related thereto, the potential receipt of royalty payments, preclinical testing and clinical trials of potential products, the period of time that our existing capital resources will meet our funding requirements, and our financial results of operations. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various risks and uncertainties, including those set forth in this Annual Report on Form 10-K under the heading "Item 1A. Risk Factors." See "Forward-Looking Statements" in Part I of this Annual Report on Form 10-K.

Overview

We discover and develop innovative and life-changing pharmaceuticals, in diseases with high unmet medical needs, through our novel research and development (R&D) platform, focused on neurological and endocrine based diseases and disorders. Utilizing a portfolio approach to drug discovery, we have multiple small molecule drug candidates at various stages of pharmaceutical development. We develop proprietary pharmaceuticals for our pipeline, as well as collaborate with other pharmaceutical companies on our discoveries.

To date, we have not generated any revenues from the sale of products. We have funded our operations primarily through private and public offerings of our common stock and payments received under research and development collaboration agreements. While we independently develop many of our product candidates, we have entered into collaborations for several of our programs, and intend to rely on existing and future collaborators to meet funding requirements. We expect to generate future operating cash flow losses as product candidates are advanced through the various stages of clinical development. As of December 31, 2016, we had an accumulated deficit of approximately \$1.1 billion and expect to incur operating cash flow losses for the foreseeable future, which may be greater than losses in prior years.

Our three lead late-stage clinical programs are elagolix, a gonadotropin-releasing hormone (GnRH) antagonist in Phase III development for endometriosis and uterine fibroids that is partnered with AbbVie Inc. (AbbVie), opicapone, a highly-selective catechol-O-methyltransferase inhibitor (COMT inhibitor) that is an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors for adult patients with Parkinson's disease and was licensed from BIAL – Portela & CA, S.A. (BIAL) and a vesicular monoamine transporter 2 (VMAT2) inhibitor, INGREZZA™ (valbenazine) for the treatment of movement disorders. The New Drug Application (NDA) for INGREZZA has been filed with the U.S. Food and Drug Administration (FDA) for tardive dyskinesia and is also currently in Phase II development for Tourette syndrome. We intend to commercialize INGREZZA in the United States subject to FDA approval of our pending NDA for tardive dyskinesia.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based upon financial statements that we have prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses, and related disclosures. On an on-going basis, we evaluate these estimates, including those related to revenue recognition, clinical trial accruals (research and development expense) and share-based compensation. Estimates are based on historical experience, information received from third parties and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Historically, revisions to our estimates have not resulted in a material change

to the financial statements. The items in our financial statements requiring significant estimates and judgments are as follows:

Revenue Recognition

We recognize revenue for the performance of services when each of the following four criteria is met: (i) persuasive evidence of an arrangement exists; (ii) services are rendered or products are delivered; (iii) the sales price is fixed or determinable; and (iv) collectability is reasonably assured.

Since 2011, we have followed the Accounting Standards Codification (ASC) for Revenue Recognition – Multiple-Element Arrangements, if applicable, to determine the recognition of revenue under license and collaboration agreements. The terms of these agreements generally contain multiple elements, or deliverables, which may include (i) licenses to our intellectual property, (ii) materials and technology, (iii) pharmaceutical supply, (iv) participation on joint development or joint steering committees, and (v) development services. The payments we receive under these arrangements typically include one or more of the following: up-front license fees; funding of research and/or development efforts; amounts due upon the achievement of specified milestones; manufacturing and royalties on future product sales.

The ASC provides guidance relating to the separation of deliverables included in an arrangement into different units of accounting and the allocation of consideration to the units of accounting. The evaluation of multiple-element arrangements requires management to make judgments about (i) the identification of deliverables, (ii) whether such deliverables are separable from the other aspects of the contractual relationship, (iii) the estimated selling price of each deliverable, and (iv) the expected period of performance for each deliverable.

To determine the units of accounting under a multiple-element arrangement, we evaluate certain separation criteria, including whether the deliverables have stand-alone value, based on the relevant facts and circumstances for each arrangement. The selling prices of deliverables under an arrangement may be derived using vendor specific objective evidence (VSOE), third-party evidence, or a best estimate of selling price (BESP), if VSOE or third-party evidence is not available. For most pharmaceutical licensing and collaboration agreements, BESP is utilized. The objective of BESP is to determine the price at which we would transact a sale if the element within the agreement was sold on a standalone basis. Establishing BESP involves our judgment and considers multiple factors, including market conditions and company-specific factors, including those factors contemplated in negotiating the agreements, as well as internally developed models that include assumptions related to market opportunity, discounted cash flows, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the agreement. In validating the BESP, we consider whether changes in key assumptions used to determine the BESP will have a significant effect on the allocation of the arrangement consideration between the multiple deliverables. The allocated consideration for each unit of accounting is recognized over the related obligation period in accordance with the applicable revenue recognition criteria.

If there are deliverables in an arrangement that are not separable from other aspects of the contractual relationship, they are treated as a combined unit of accounting, with the allocated revenue for the combined unit recognized in a manner consistent with the revenue recognition applicable to the final deliverable in the combined unit. Payments received prior to satisfying the relevant revenue recognition criteria are recorded as deferred revenue in the accompanying balance sheets and recognized as revenue when the related revenue recognition criteria are met.

We typically receive up-front payments when licensing our intellectual property, which often occurs in conjunction with a research and development agreement. We recognize revenue attributed to the license upon delivery, provided that the license has stand-alone value.

Revenues from development milestones are accounted for in accordance with the Revenue Recognition – Milestone Method Topic of the Financial Accounting Standards Board (FASB) ASC (Milestone Method). Milestones are recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence that the milestone has been achieved, provided that the milestone event is substantive. A milestone event is considered to be substantive if its achievability was not reasonably assured at the inception of the agreement and our efforts led to the achievement of the milestone or the milestone was due upon the occurrence of a specific outcome resulting from our performance. We assess whether a milestone is substantive at the inception of each agreement. For payments payable on achievement of milestones that do not meet all of the conditions to be considered substantive, we recognize the portion of the payment allocable to delivered items as revenue when the specific milestone is achieved, and the contingency is removed.

Prior to the revised multiple element guidance described above, adopted by us on January 1, 2011, upfront, nonrefundable payments for license fees, grants, and advance payments for sponsored research revenues received in excess of amounts earned were classified as deferred revenue and recognized as income over the contract or development period.

Mitsubishi Tanabe Pharma Corporation (Mitsubishi Tanabe). On March 31, 2015, we entered into a collaboration and license agreement with Mitsubishi Tanabe for the development and commercialization of INGREZZA (valbenazine) for movement disorders in Japan and other select Asian markets. Payments to us under this agreement include an up-front license fee of \$30 million, up to \$85 million in development and commercialization event-based payments, payments for the manufacture of pharmaceutical products, and royalties on product sales in select territories in Asia. Under the terms of the agreement, Mitsubishi Tanabe is responsible for all third-party development, marketing and commercialization costs in Japan and other select Asian markets with the exception of a single Huntington's chorea clinical trial to be performed by us, at an estimated cost of approximately \$12 million, should Mitsubishi Tanabe request the clinical trial. We will be entitled to a percentage of sales of INGREZZA in Japan and other select Asian markets for the longer of ten years or the life of the related patent rights.

Under our agreement with Mitsubishi Tanabe, the collaboration effort between the parties to advance INGREZZA towards commercialization in Japan and other select Asian markets is governed by a joint steering committee and joint development committee with representatives from both us and Mitsubishi Tanabe. There are no performance, cancellation, termination or refund provisions in the agreement that would have a material financial consequence to us. We do not directly control when event-based payments will be achieved or when royalty payments will begin. Mitsubishi Tanabe may terminate the agreement at its discretion upon 180 days' written notice to us. In such event, all INGREZZA product rights for Japan and other select Asian markets would revert to us.

We have identified the following deliverables associated with the Mitsubishi Tanabe agreement: INGREZZA technology license and existing know-how, development activities to be performed as part of the collaboration, and the manufacture of pharmaceutical products. The respective standalone value from each of these deliverables has been determined by applying the BSP method and the revenue was allocated based on the relative selling price method with revenue recognition timing to be determined either by delivery or the provision of services.

As discussed above, the BSP method required the use of significant estimates. We used an income approach to estimate the selling price for the technology license and an expense approach for estimating development activities and the manufacture of pharmaceutical products. The development activities and the manufacture of pharmaceutical products are expected to be delivered throughout the duration of the agreement. The technology license and existing know-how was delivered on the effective date of the agreement.

For the year ended December 31, 2015, we recognized revenue under this agreement of \$19.8 million associated with the delivery of a technology license and existing know-how. In accordance with our continuing

performance obligations, \$10.2 million of the \$30 million up-front payment is being deferred and recognized in future periods. Under the terms of the agreement, there is no general obligation to return the up-front payment for any non-contingent deliverable. No revenue was recognized under the Mitsubishi Tanabe agreement for the year ended December 31, 2016.

We also evaluated the event-based payments under the Milestone Method and concluded only one immaterial event-based payment represents a substantive milestone. Event-based payments will be recognized when earned.

We are eligible to receive tiered royalty payments based on product sales in Japan and other select Asian markets. Royalties will be recognized as earned in accordance with the terms of the agreement, when product sales are reported by Mitsubishi Tanabe, the amount can be reasonably estimated, and collectability is reasonably assured.

AbbVie Inc. (AbbVie). In June 2010, we announced an exclusive worldwide collaboration with AbbVie to develop and commercialize elagolix and all next-generation GnRH antagonists (collectively, GnRH Compounds) for women's and men's health. AbbVie made an upfront payment of \$75 million and agreed to make additional development and regulatory event-based payments of up to \$480 million and up to an additional \$50 million in commercial event-based payments. We assessed event-based payments under the revised authoritative guidance for research and development milestones and determined that event-based payments prior to commencement of a Phase III clinical study, as defined in the agreement, meet the definition of a milestone in accordance with authoritative guidance as (i) they are events that can only be achieved in part on our past performance, (ii) there is substantive uncertainty at the date the arrangement was entered into that the event will be achieved and (iii) they result in additional payments being due to us. Development and regulatory event-based payments subsequent to the commencement of a Phase III clinical study, however, currently do not meet these criteria as their achievement is based on the performance of AbbVie. As of December 31, 2016, \$485 million remains outstanding in future event-based payments under the agreement. However, none of the remaining event-based payments meet the definition of a milestone in accordance with authoritative accounting guidance and will be recognized when earned.

Under the terms of the agreement, AbbVie is responsible for all third-party development, marketing and commercialization costs. We will be entitled to a percentage of worldwide sales of GnRH Compounds for the longer of ten years or the life of the related patent rights. AbbVie may terminate the collaboration at its discretion upon 180 days' written notice to us. In such event, we would be entitled to specified payments for ongoing clinical development and related activities and all GnRH Compound product rights would revert to us. During 2016, event-based revenue of \$15.0 million was recognized related to AbbVie's initiation of Phase III development of elagolix in uterine fibroids. No revenue was recognized during 2015 or 2014 under this collaboration agreement.

Research and Development Expense

R&D expenses consists primarily of salaries, payroll taxes, employee benefits, and share-based compensation charges, for those individuals involved in ongoing research and development efforts; as well as scientific contractor fees, preclinical and clinical trial costs, research and development facilities costs, laboratory supply costs, and depreciation of scientific equipment. All such costs are charged to R&D expense as incurred. These expenses result from our independent R&D efforts as well as efforts associated with collaborations and licensing arrangements. In addition, we fund R&D and clinical trials at other companies and research institutions under agreements, which are generally cancelable. We review and accrue clinical trials expense based on work performed, which relies on estimates of total costs incurred based on patient enrollment, completion of studies and other events. We follow this method since reasonably dependable estimates of the costs applicable to various stages of a research agreement or clinical trial can be made. Accrued clinical costs are subject to revisions as trials progress. Revisions are charged to expense in the period in which the facts that give rise to the revision

become known. Historically, revisions have not resulted in material changes to R&D expense; however a modification in the protocol of a clinical trial or cancellation of a trial could result in a charge to our results of operations.

Share-Based Compensation

We grant stock options to purchase our common stock to our employees and directors under our 2011 Equity Incentive Plan (the 2011 Plan) and grant stock options to certain employees pursuant to Employment Commencement Nonstatutory Stock Option Agreements (inducement grants). We also grant certain employees stock bonuses and restricted stock units (RSUs) under the 2011 Plan. Additionally, we have outstanding options that were granted under previous equity plans from which we no longer make grants. Share-based compensation expense related to these equity instruments for the years ended December 31, 2016, 2015 and 2014 was \$28.5 million, \$28.4 million and \$10.4 million, respectively.

Stock option awards and RSUs generally vest over a three to four year period and expense is ratably recognized over those same time periods. For RSUs with performance-based vesting requirements (PRSUs), no expense is recorded until the performance condition is probable of being achieved; upon which expense is then recognized ratably over the expected performance period. Because the performance based criteria for vesting for the PRSUs was not immediately probable, no associated expense was recorded for the year ended December 31, 2014. During 2016 and 2015, we recognized approximately \$1.8 million and \$8.8 million, respectively, in expense related to certain PRSUs as it became probable that pre-defined performance conditions would be met primarily due to the Phase III results of the Kinect 3 clinical study which were unblinded during the third quarter of 2015.

For purposes of calculating share-based compensation, we estimate the fair value of share-based compensation awards using a Black-Scholes option-pricing model. The determination of the fair value of share-based compensation awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including but not limited to expected stock price volatility over the term of the awards and the expected term of stock options. Our stock options have characteristics significantly different from those of traded options, and changes in the assumptions can materially affect the fair value estimates. For example, an increase in the underlying stock price results in a significant increase in the Black-Scholes option-pricing, which includes estimates such as expected term, expected volatility and interest rates.

If factors change and we employ different assumptions, share-based compensation expense may differ significantly from what we have recorded in the past. If there is a difference between the assumptions used in determining share-based compensation expense and the actual factors which become known over time, specifically with respect to anticipated forfeitures, we may change the input factors used in determining share-based compensation expense for future grants. These changes, if any, may materially impact our results of operations in the period such changes are made. If actual forfeitures vary from our estimates, we will recognize the difference in compensation expense in the period the actual forfeitures occur or at the time of vesting.

Results of Operations for Years Ended December 31, 2016, 2015 and 2014

Revenue

The following table summarizes our primary sources of revenue during the periods presented:

	Year Ended December 31,		
	2016	2015	2014
	(In millions)		
Revenues under collaboration agreements:			
Mitsubishi Tanabe Pharma, Inc.	\$ —	\$19.8	\$—
AbbVie, Inc.	15.0	—	—
Total revenues	<u>\$15.0</u>	<u>\$19.8</u>	<u>\$—</u>

As discussed above, during 2016, we recognized \$15.0 million in event-based revenue under our collaboration agreement with AbbVie as a result of AbbVie initiating Phase III clinical studies of elagolix in patients with uterine fibroids.

As discussed above, during 2015, we entered into a collaboration and license agreement with Mitsubishi Tanabe for the development and commercialization of our VMAT2 inhibitor INGREZZA for movement disorders in Japan and other select Asian markets. Payments from Mitsubishi Tanabe under this agreement included an up-front license fee of \$30 million. During 2015, we recorded revenues of \$19.8 million related to the up-front license fee.

Operating Expenses

Research and Development

Our R&D expenditures include costs related to preclinical and clinical trials, scientific personnel, equipment, consultants, sponsored research, share-based compensation and allocated facility costs. We do not track fully burdened R&D costs separately for each of our drug candidates. We review our R&D expenses by focusing on four categories: external development, personnel, facility and depreciation, and other. External development expenses consist of costs associated with our external preclinical and clinical trials, including pharmaceutical development and manufacturing. Personnel expenses include salaries and wages, share-based compensation, payroll taxes and benefits for those individuals involved in ongoing research and development efforts. Other R&D expenses mainly represent lab supply expenses, scientific consulting expenses and other expenses.

The following table presents our total R&D expenses by category during the periods presented:

	Years Ended December 31,		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(In millions)		
External development expense:			
VMAT2	\$32.4	\$29.3	\$ 9.0
CRF	2.5	3.3	2.8
Other	<u>1.0</u>	<u>1.2</u>	<u>2.6</u>
Total external development expense	35.9	33.8	14.4
R&D personnel expense	34.1	32.8	20.2
R&D facility and depreciation expense	6.3	6.0	5.8
Other R&D expense	<u>18.0</u>	<u>8.9</u>	<u>6.0</u>
Total research and development expense	<u>\$94.3</u>	<u>\$81.5</u>	<u>\$46.4</u>

R&D expense increased from \$81.5 million in 2015 to \$94.3 million in 2016. This increase was primarily due to a \$9.1 million increase in other R&D expenses related to efforts around our NDA filing of INGREZZA for tardive dyskinesia, including \$2.4 million for the related FDA filing fee and an increase in scientific consulting expense of approximately \$6.6 million. Additionally, external development expenses related to our INGREZZA Phase III clinical program in tardive dyskinesia and Phase II program in Tourette syndrome increased by \$3.1 million from 2015 to 2016.

R&D expense increased from \$46.4 million in 2014 to \$81.5 million in 2015. The \$35.1 million increase in R&D expense was due in part to a \$19.4 million increase in external development expenses primarily related to our INGREZZA Phase III clinical program, which was initiated during the second half of 2014. Approximately \$12.6 million of the increase in R&D expense was due to higher R&D personnel related expense. Share-based compensation expense increased by approximately \$7.9 million from 2014 to 2015; approximately \$4.2 million

of which was related to PRSUs expense recognized during 2015. An increase in R&D headcount and other personnel related costs accounted for the balance of the increase in personnel expense. Other R&D expense also increased by \$2.9 million from 2014 to 2015 primarily due to external consulting expenses as we expanded our efforts on the NDA for INGREZZA in tardive dyskinesia.

The funding necessary to bring a drug candidate to market is subject to numerous uncertainties, which may adversely affect our liquidity and capital resources. Once a drug candidate is identified, the further development of that drug candidate can be halted or abandoned at any time due to a number of factors. These factors include, but are not limited to, funding constraints, safety or a change in market demand.

The nature and efforts required to develop our drug candidates into commercially viable products include research to identify a clinical candidate, preclinical development, clinical testing, FDA approval and commercialization. For each drug candidate that successfully completes all stages of R&D, and is commercialized, total R&D spending in the pharmaceutical industry may exceed \$2 billion. Additionally, the stages of R&D can take in excess of ten years to complete for each drug candidate.

For each of our drug candidate programs, we periodically assess the scientific progress and merits of the programs to determine if continued R&D is economically viable. Certain of our programs have been terminated due to the lack of scientific progress and lack of prospects for ultimate commercialization. Because of the uncertainties associated with R&D of these programs, we may not be successful in achieving commercialization. As such, the ultimate timeline and costs to commercialize a product cannot be accurately estimated. Additionally, due to the uncertainty inherent in drug development, R&D costs are subject to considerable variation.

We expect research and development expenses in 2017 to be consistent with 2016 levels. During 2016, we substantially completed the Phase III development of INGREZZA for tardive dyskinesia, the savings of which will be offset in 2017 by expanded development efforts in our Tourette syndrome program as well as activities related to other early stage programs in our product pipeline.

General and Administrative

General and administrative expenses were \$68.1 million in 2016 compared to \$32.5 million in 2015 and \$18.0 million in 2014. The \$35.6 million increase in general and administrative expense from 2015 to 2016 was primarily due to higher personnel related costs associated with an increase in headcount to support our commercial launch preparations for INGREZZA in tardive dyskinesia (increased by \$13.5 million). Additionally, external costs related to market research, commercial launch preparation and other professional services were \$20.2 million higher for 2016 when compared to 2015.

The majority of the \$14.5 million increase in expenses from 2014 to 2015 was due to higher personnel related expenses. Share-based compensation expense increased by approximately \$10.1 million from 2014 to 2015; approximately \$4.6 million of which was related to PRSUs expense recognized in 2015. An increase in headcount and other personnel related costs accounted for approximately \$2.1 million of additional increase in personnel expense. Higher market research, licensing and other professional fees accounted for approximately \$1.9 million of the increase in general and administrative expenses from 2014 to 2015.

We expect our general and administrative expenses in 2017 to increase significantly from 2016 expense levels due to anticipated commercialization activities related to INGREZZA for tardive dyskinesia.

Net Loss

Our net loss for 2016 was \$141.1 million, or \$1.63 net loss per common share, our net loss for 2015 was \$88.9 million, or \$1.05 net loss per common share, and our net loss for 2014 was \$60.5 million, or \$0.81 net loss per common share.

The increase in our net loss from 2015 to 2016 was primarily a result of the above mentioned higher overall expenses. In addition, revenue for 2016 decreased by \$4.8 million due to the revenue recognized from the up-front license fee from Mitsubishi Tanabe in 2015 (\$19.8 million) being greater than the \$15.0 million milestone payment received from AbbVie during 2016.

The increase in our net loss from 2014 to 2015 was a result of the above mentioned higher overall expenses offset partially by an increase in revenue of approximately \$19.8 million from the Mitsubishi Tanabe agreement.

We expect to have a net loss in 2017, primarily due to significantly higher general and administrative expenses as we execute our plan for commercialization of INGREZZA in tardive dyskinesia. Ongoing operational R&D expenses for 2017 are expected to be consistent with 2016 levels due to the completion of Phase III development of INGREZZA for tardive dyskinesia, offset by expanded development efforts in our Tourette syndrome program as well as activities related to other early stage programs in our product pipeline. Costs associated with the licensing of Opicapone from BIAL will increase overall R&D costs for 2017. Revenue is expected to increase in 2017 due to an anticipated \$30 million event-based payment from AbbVie related to filing of the NDA for elagolix in endometriosis, as well as anticipated product sales of INGREZZA in tardive dyskinesia upon FDA approval.

Liquidity and Capital Resources

At December 31, 2016, our cash, cash equivalents, and investments totaled \$350.8 million compared with \$461.7 million at December 31, 2015.

Net cash used in operating activities during 2016 was \$106.2 million compared to \$38.0 million in 2015. The \$68.2 million change in cash flows from operating activities is primarily due an increase in net loss of approximately \$52.2 million. In addition, during 2015, we received \$30.0 million from Mitsubishi Tanabe as an upfront licensing payment; of which approximately \$10.2 million was accounted for as deferred revenue.

Net cash used in operating activities during 2015 was \$38.0 million compared to \$47.1 million in 2014. The \$9.1 million change in cash flows from operating activities is primarily due to an increase in operating expenses of approximately \$49.6 million; of which approximately \$18.0 million consisted of non-cash share-based compensation expense. This increase in operating expenses was offset by a \$30 million up-front payment from Mitsubishi Tanabe received in the second quarter of 2015, and an increase in current accounts payable and accrued liabilities of approximately \$9.8 million.

Net cash provided by investing activities was \$112.9 million in 2016 as compared to net cash used in investing activities of \$195.8 million and \$105.4 million 2015 and 2014, respectively. The fluctuation in net cash used in investing activities resulted primarily from the timing differences in investment purchases, sales and maturities, and the fluctuation of our portfolio mix between cash equivalents and short-term investment holdings. The average term to maturity in our investment portfolio is less than one year.

Net cash provided by financing activities during 2016 was \$2.4 million compared to \$277.0 million and \$138.7 million in 2015 and 2014, respectively. Cash provided by financing activities included approximately \$270.7 and \$133.2 million from our public offering of common stock in February 2015 and 2014, respectively. During 2016, 2015 and 2014 stock option exercises yielded approximately \$2.4 million, \$6.3 million and \$5.6 million, respectively, in cash proceeds. We had no outstanding debt at December 31, 2016.

Equity Financing. In February 2015, we completed a public offering of common stock in which we sold 8.0 million shares of our common stock at an offering price of \$36.00 per share. The shares were sold pursuant to a shelf registration statement with the Securities and Exchange Commission (SEC). The net proceeds generated from this transaction, after underwriting discounts and commissions and offering costs, were approximately \$270.7 million.

In February 2014, we completed a public offering of common stock in which we sold 8.0 million shares of our common stock at an offering price of \$17.75 per share. The shares were sold pursuant to a shelf registration statement with the SEC. The net proceeds generated from this transaction, after underwriting discounts and commissions and offering costs, were approximately \$133.2 million.

Factors That May Affect Future Financial Condition and Liquidity

We anticipate increases in expenditures as we continue our R&D activities and execute on our plan for commercialization of INGREZZA. Because of our limited financial resources, our strategies to develop some of our programs include collaborative agreements with major pharmaceutical companies and sales of our common stock in both public and private offerings. Our collaborative agreements typically include a partial recovery of our research costs through license fees, contract research funding and milestone revenues. Our collaborators are also financially and managerially responsible for clinical development and commercialization. In these cases, the estimated completion date would largely be under the control of the collaborator. We cannot forecast, with any degree of certainty, which other proprietary products or indications, if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our capital requirements.

Our inlicense, research and clinical development agreements are generally cancelable with written notice within 180 days or less. In addition to the minimum annual payments due under certain inlicense and research agreements, including a \$30 million upfront license fee due to BIAL in February 2017, we may be required to pay up to approximately \$132 million in milestone payments, plus sales royalties, in the event that all scientific research, development and commercialization milestones under these agreements are achieved.

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business. On December 1, 2015, Icahn School of Medicine at Mount Sinai (Mount Sinai) filed a complaint against us in the United States District Court for the Southern District of New York: *Icahn School of Medicine at Mount Sinai v. Neurocrine Biosciences, Inc.*, Case No. 1:15-cv-09414. In the complaint, Mount Sinai alleges that we, by entering into an exclusive worldwide collaboration with AbbVie to develop and commercialize next-generation GnRH antagonists, breached our license agreement with Mount Sinai dated August 27, 1999 (Mount Sinai License). Mount Sinai is seeking unspecified monetary damages, future sublicensing fees and attorney's fees. In January 2016, we filed a motion to dismiss this complaint in its entirety. In June 2016, the Court denied the motion in part and granted the motion in part, ruling that while Mount Sinai could continue its lawsuit against us, there was no requirement for us to obtain Mount Sinai's consent prior to licensing the next-generation GnRH antagonists to AbbVie. In July 2016, we filed our answer denying Mount Sinai's allegations, and filed counterclaims against Mount Sinai alleging patent misuse, non-infringement of Mount Sinai's patents, and that Mount Sinai's patents that are subject to the Mount Sinai License are invalid. Mount Sinai has filed a motion to dismiss our counterclaims and affirmative defenses. We believe that we have meritorious defenses to the claims made in the complaint and intend to vigorously defend ourselves against such claims, but we are not able to predict the ultimate outcome of this action, or estimate any potential loss.

We lease our office and research laboratories under an operating lease with an initial term that expires at the end of 2019. Additionally, our facility lease agreement calls for us to maintain \$50 million in cash and investments at all times, or to increase our security deposit by \$5 million.

As of December 31, 2016, the total estimated future annual minimum lease payments under our non-cancelable operating lease obligations are as follows (*in thousands*):

	<u>Payment Amount</u>
Year ending:	
2017	\$ 7,834
2018	8,070
2019	8,311
2020	—
2021 and thereafter	—
Total future minimum lease payments	<u>\$24,215</u>

The funding necessary to execute our business strategies is subject to numerous uncertainties, which may adversely affect our liquidity and capital resources. Completion of clinical trials may take several years or more, but the length of time generally varies substantially according to the type, complexity, novelty and intended use of a product candidate. It is also important to note that if a clinical candidate is identified, the further development of that candidate can be halted or abandoned at any time due to a number of factors. These factors include, but are not limited to, funding constraints, safety or a change in market demand.

The nature and efforts required to develop our product candidates into commercially viable products include research to identify a clinical candidate, preclinical development, clinical testing, FDA approval and commercialization. For each drug candidate that successfully completes all stages of R&D, and is commercialized, total R&D spending in the pharmaceutical industry may exceed \$2 billion. Additionally, the stages of research and development can take in excess of ten years to complete for each drug candidate.

We test our potential product candidates in numerous preclinical studies to identify disease indications for which our product candidates may show efficacy. We may conduct multiple clinical trials to cover a variety of indications for each product candidate. As we obtain results from trials, we may elect to discontinue clinical trials for certain product candidates or for certain indications in order to focus our resources on more promising product candidates or indications. The duration and the cost of clinical trials may vary significantly over the life of a project as a result of differences arising during the clinical trial protocol, including, among others, the following:

- we or the FDA or similar foreign regulatory authorities may suspend the trials;
- we may discover that a product candidate may cause harmful side effects;
- patient recruitment may be slower than expected; and
- patients may drop out of the trials.

For each of our programs, we periodically assess the scientific progress and merits of the programs to determine if continued R&D is economically viable. Certain of our programs have been terminated due to the lack of scientific progress and lack of prospects for ultimate commercialization. Because of the uncertainties associated with R&D of these programs, we may not be successful in achieving commercialization. As such, the ultimate timeline and costs to commercialize a product cannot be accurately estimated.

Our product candidates have not yet achieved FDA regulatory approval, which is required before we can market them as therapeutic products in the United States. In order to proceed to subsequent clinical trial stages and to ultimately achieve regulatory approval, the FDA must conclude that our clinical data establish safety and efficacy. We must satisfy the requirements of similar regulatory authorities in foreign countries in order to market products in those countries. The results from preclinical testing and early clinical trials may not be predictive of results in later clinical trials. It is possible for a candidate to show promising results in clinical trials, but subsequently fail to establish sufficient safety and efficacy data necessary to obtain regulatory approvals.

As a result of the uncertainties discussed above, among others, the duration and completion costs of our R&D projects are difficult to estimate and are subject to considerable variation. Our inability to complete our R&D projects in a timely manner or our failure to enter into collaborative agreements, when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. These uncertainties could force us to seek additional, external sources of financing from time to time in order to continue with our business strategy. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

Even if we obtain regulatory approval for the commercialization of any product candidate, we currently have limited experience in marketing and selling pharmaceutical products, have no sales force established to sell pharmaceutical products and have only recently begun establishing our distribution and reimbursement capabilities, all of which will be necessary to successfully commercialize any product candidate approved by the FDA. If we fail to establish successful marketing, sales, and reimbursement capabilities, or fail to enter into successful arrangements with third parties, our product revenues may suffer. We also may be required to make further substantial expenditures if unforeseen difficulties arise in other areas of our business. In particular, our future capital requirements will depend on many factors, including:

- continued scientific progress in our R&D programs;
- the magnitude of our R&D programs;
- progress with preclinical testing and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in filing and pursuing patent applications and enforcing patent claims;
- competing technological and market developments;
- the establishment of additional collaborations and strategic alliances;
- developments related to on-going litigation;
- the cost of manufacturing facilities and of commercialization activities and arrangements; and
- the cost of product in-licensing and any possible acquisitions.

We believe that our existing capital resources, together with investment income and future payments due under our strategic alliances, will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, we cannot guarantee that our existing capital resources and anticipated revenues will be sufficient to conduct and complete all of our research and development programs or commercialization activities as planned.

We will require additional funding to continue our research and product development programs, to conduct preclinical studies and clinical trials, for operating expenses, to pursue regulatory approvals for our product candidates, for the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims, if any, for the cost of product in-licensing and for any possible acquisitions, and we may require additional funding to establish manufacturing and marketing capabilities in the future. We may seek to access the public or private equity markets whenever conditions are favorable. For example, for so long as we continue to satisfy the requirements to be deemed a well-known seasoned issuer, we can file a shelf registration statement with the SEC, which will become automatically effective and will allow us to issue an unlimited number of shares of our common stock from time to time. We may also seek additional funding through strategic alliances or other financing mechanisms. We cannot assure you that adequate funding will be available on terms acceptable to us, if at all. Any additional equity financings will be dilutive to our stockholders and any additional debt may involve operating covenants that may restrict our business. If adequate funds are not available through these means, we may be required to curtail significantly one or more of our research or development programs or obtain funds through arrangements with collaborators or others. This may require us to relinquish rights to

certain of our technologies or product candidates. To the extent that we are unable to obtain third-party funding for such expenses, we expect that increased expenses will result in increased cash flow losses from operations. We cannot assure you that we will successfully develop our products under development or that our products, if successfully developed, will generate revenues sufficient to enable us to earn a profit.

Interest Rate Risk

We are exposed to interest rate risk on our short-term investments. The primary objective of our investment activities is to preserve principal while at the same time maximizing yields without significantly increasing risk. To achieve this objective, we invest in highly liquid and high quality government and other debt securities. To minimize our exposure due to adverse shifts in interest rates, we invest in short-term securities and ensure that the maximum average maturity of our investments does not exceed 12 months. If a 10% change in interest rates were to have occurred on December 31, 2016, this change would not have had a material effect on the fair value of our investment portfolio as of that date. Due to the short holding period of our investments, we have concluded that we do not have a material financial market risk exposure.

New Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) amended the existing accounting standards for revenue recognition, which outlines a comprehensive revenue recognition model and supersedes most current revenue recognition guidance. The new standard requires a company to recognize revenue upon transfer of goods or services to a customer at an amount that reflects the expected consideration to be received in exchange for those goods or services. The amended guidance defines a five-step approach for recognizing revenue, which may require us to use more judgment and make more estimates than under the current guidance. The new standard allows for two methods of adoption: (a) full retrospective adoption, meaning the standard is applied to all periods presented, or (b) modified retrospective adoption, meaning the cumulative effect of applying the new standard is recognized as an adjustment to the opening retained earnings balance. The amended guidance as currently issued will be effective in 2018, however early adoption is permitted.

We are currently evaluating the impact of the new standard on historical revenue recorded for our two collaboration agreements. Additionally, we have no historical pharmaceutical product revenue and we could potentially generate initial pharmaceutical product revenue in 2017. The ongoing evaluation is dependent upon the outcome of several items that are not related to the assessment of our two contracts as well as the resolution of certain questions relating to the application of, and transition to, the new revenue recognition guidance for collaboration agreements. We anticipate that our evaluation will be completed in the first quarter of 2017. We are weighing adopting the new standard in the first quarter of 2017, but our ultimate decision as to whether to adopt and the method of adoption are dependent upon the finalization of the outstanding items noted above. We will then determine the ultimate timing of adoption and adoption method as well as the ultimate impact the adoption of this standard will have on our consolidated financial statements. Based on our current assessment of the effect of the new standard on historical revenue under our collaboration agreements that is related to contingent payments, which are not dependent on performance by us, we believe revenue could potentially be recognized earlier than historically recorded if information is available to allow us to record the payments without the risk of a future reversal.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. The new ASU disclosure requirement explicitly requires us to assess an entity’s ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. In connection with each annual and interim period, we will assess if there is substantial doubt about an our ability to continue as a going concern within one year after the issuance date by considering relevant conditions that are known (and reasonably knowable) at the issuance date. If significant doubt exists, we will need to assess if our plans will or will not alleviate substantial doubt in order to determine the specific disclosures. We adopted the ASU during 2016, the adoption of this standard did not have a material impact on our financial statements.

In January 2016 the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. This new standard amends certain aspects of accounting and disclosure requirements of financial instruments, including the requirement that equity

investments with readily determinable fair values be measured at fair value with changes in fair value recognized in our results of operations. This new standard does not apply to investments accounted for under the equity method of accounting or those that result in consolidation of the investee. Equity investments that do not have readily determinable fair values may be measured at fair value or at cost minus impairment adjusted for changes in observable prices. A financial liability that is measured at fair value in accordance with the fair value option is required to be presented separately in other comprehensive income for the portion of the total change in the fair value resulting from change in the instrument-specific credit risk. In addition, a valuation allowance should be evaluated on deferred tax assets related to available-for-sale debt securities in combination with other deferred tax assets. This new standard will be effective January 1, 2018. The adoption of this standard is not expected to have a material impact on our financial position or results of operations.

In February 2016, the FASB issued Accounting Standards Update 2016-02, Leases. This update amends the current accounting guidance for lease transactions. Under the new guidance, a lessee will be required to recognize both assets and liabilities for any leases in excess of twelve months. Additionally, certain qualitative and quantitative disclosures will also be required in the financial statements. The Company is required to adopt this new guidance beginning in 2019 and early adoption is permitted. The Company is in the process of determining the effects this update will have on the consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This update amends the current tax accounting rules for share-based compensation in an attempt to simplify the reporting of excess tax benefits and deficiencies related to equity compensation. Additionally, the FASB has provided an alternative for forfeiture estimations related to grants of equity awards. We elected to early adopt this new guidance for 2016. The adoption of this update did not have a significant effect on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash”, which clarifies the presentation of restricted cash and restricted cash equivalents in the statements of cash flows. Under the ASU, restricted cash and restricted cash equivalents are included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts presented on the statements of cash flows. The ASU is intended to reduce diversity in practice in the classification and presentation of changes in restricted cash on the Consolidated Statement of Cash Flows. The ASU requires that the Consolidated Statement of Cash Flows explain the change in total cash and equivalents and amounts generally described as restricted cash or restricted cash equivalents when reconciling the beginning-of-period and end-of-period total amounts. The ASU also requires a reconciliation between the total of cash and equivalents and restricted cash presented on the Consolidated Statement of Cash Flows and the cash and equivalents balance presented on the Consolidated Balance Sheet. The ASU is effective retrospectively on January 1, 2018, with early adoption permitted. We do not expect the adoption of the ASU to have a material effect on our results of operations, financial condition or cash flows.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Information required by this item is contained in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Interest Rate Risk.” Such information is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

**NEUROCRINE BIOSCIENCES, INC.
INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS**

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	63
Consolidated Balance Sheets as of December 31, 2016 and 2015	64
Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2016, 2015 and 2014	65
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015 and 2014	66
Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014	67
Notes to the Consolidated Financial Statements	68

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
Neurocrine Biosciences, Inc.

We have audited the accompanying consolidated balance sheets of Neurocrine Biosciences, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Neurocrine Biosciences, Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Neurocrine Biosciences, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 14, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
February 14, 2017

NEUROCRINE BIOSCIENCES, INC.

Consolidated Balance Sheets
(In thousands, except for par value and share totals)

	December 31,	
	2016	2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 83,267	\$ 74,195
Short-term investments, available-for-sale	224,083	304,996
Other current assets	3,092	4,883
Total current assets	310,442	384,074
Property and equipment, net	6,271	3,432
Long-term investments, available-for-sale	43,490	82,488
Restricted cash	4,883	4,791
Total assets	\$ 365,086	\$ 474,785
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 5,085	\$ 2,561
Accrued liabilities	21,097	19,034
Current portion of deferred rent	470	269
Current portion of cease-use liability	236	428
Current portion of deferred gain on sale of real estate	3,526	3,423
Total current liabilities	30,414	25,715
Deferred gain on sale of real estate	7,372	10,898
Deferred revenue	10,231	10,231
Deferred rent	1,462	1,711
Cease-use liability	617	1,555
Other liabilities	113	221
Total liabilities	50,209	50,331
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$0.001 par value; 220,000,000 shares authorized; issued and outstanding shares were 86,883,300 and 86,262,594 at December 31, 2016 and 2015, respectively	87	86
Additional paid-in capital	1,371,432	1,340,579
Accumulated other comprehensive loss	(318)	(977)
Accumulated deficit	(1,056,324)	(915,234)
Total stockholders' equity	314,877	424,454
Total liabilities and stockholders' equity	\$ 365,086	\$ 474,785

See accompanying notes.

NEUROCRINE BIOSCIENCES, INC.

Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except net loss per share data)

	Year Ended December 31,		
	2016	2015	2014
Revenues:			
Milestones and license fees	\$ 15,000	\$ 19,769	\$ —
Total revenues	15,000	19,769	—
Operating expenses:			
Research and development	94,291	81,491	46,425
General and administrative	68,081	32,480	17,986
Total operating expenses	162,372	113,971	64,411
Loss from operations	(147,372)	(94,202)	(64,411)
Other income:			
Gain (loss) on sale/disposal of assets	8	9	(4)
Deferred gain on real estate	3,423	3,325	3,226
Investment income, net	2,838	1,928	629
Other income, net	13	11	18
Total other income	6,282	5,273	3,869
Net loss	<u>\$(141,090)</u>	<u>\$(88,929)</u>	<u>\$(60,542)</u>
Net loss per common share:			
Basic	<u>\$ (1.63)</u>	<u>\$ (1.05)</u>	<u>\$ (0.81)</u>
Diluted	<u>\$ (1.63)</u>	<u>\$ (1.05)</u>	<u>\$ (0.81)</u>
Shares used in the calculation of net loss per common share:			
Basic	<u>86,713</u>	<u>84,496</u>	<u>74,577</u>
Diluted	<u>86,713</u>	<u>84,496</u>	<u>74,577</u>
Other comprehensive loss:			
Net loss	\$(141,090)	\$(88,929)	\$(60,542)
Net unrealized gains (losses) on available-for-sale securities	659	(700)	(282)
Comprehensive loss	<u>\$(140,431)</u>	<u>\$(89,629)</u>	<u>\$(60,824)</u>

See accompanying notes.

NEUROCRINE BIOSCIENCES, INC.

Consolidated Statements of Stockholders' Equity
(In thousands)

	<u>Common Stock</u>		<u>Additional Paid in Capital</u>	<u>Accumulated Other Comprehensive (Loss) Gain</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amount</u>				
BALANCE AT DECEMBER 31, 2013	67,351	\$67	\$ 886,101	\$ 5	\$ (765,763)	\$ 120,410
Net loss	—	—	—	—	(60,542)	(60,542)
Unrealized losses on investments	—	—	—	(282)	—	(282)
Share-based compensation	—	—	10,382	—	—	10,382
Issuance of common stock for restricted share units vested	93	—	—	—	—	—
Issuance of common stock for option exercises	1,022	1	5,559	—	—	5,560
Issuance of common stock, net of offering costs	<u>8,000</u>	<u>8</u>	<u>133,163</u>	<u>—</u>	<u>—</u>	<u>133,171</u>
BALANCE AT DECEMBER 31, 2014	76,466	\$76	\$1,035,205	\$(277)	\$ (826,305)	\$ 208,699
Net loss	—	—	—	—	(88,929)	(88,929)
Unrealized losses on investments	—	—	—	(700)	—	(700)
Share-based compensation	—	—	28,392	—	—	28,392
Issuance of common stock for restricted share units vested	503	1	—	—	—	1
Issuance of common stock for option exercises	1,308	1	6,303	—	—	6,304
Issuance of common stock, net of offering costs	<u>7,986</u>	<u>8</u>	<u>270,679</u>	<u>—</u>	<u>—</u>	<u>270,687</u>
BALANCE AT DECEMBER 31, 2015	86,263	\$86	\$1,340,579	\$(977)	\$ (915,234)	\$ 424,454
Net loss	—	—	—	—	(141,090)	(141,090)
Unrealized gains on investments	—	—	—	659	—	659
Share-based compensation	—	—	28,464	—	—	28,464
Issuance of common stock for restricted share units vested	284	—	—	—	—	—
Issuance of common stock for option exercises	<u>336</u>	<u>1</u>	<u>2,389</u>	<u>—</u>	<u>—</u>	<u>2,390</u>
BALANCE AT DECEMBER 31, 2016	<u>86,883</u>	<u>\$87</u>	<u>\$1,371,432</u>	<u>\$(318)</u>	<u>\$(1,056,324)</u>	<u>\$ 314,877</u>

See accompanying notes.

NEUROCRINE BIOSCIENCES, INC.
Consolidated Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2016	2015	2014
CASH FLOW FROM OPERATING ACTIVITIES			
Net loss	\$(141,090)	\$ (88,929)	\$ (60,542)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,453	1,009	827
Gain on sale of assets, net	(3,431)	(3,334)	(3,222)
Cease-use expense	(584)	(85)	—
Deferred revenues	—	10,231	—
Deferred rent	(294)	(16)	14
Amortization of premiums on investments	3,520	6,032	3,792
Non-cash share-based compensation expense	28,464	28,392	10,382
Change in operating assets and liabilities:			
Accounts receivable and other assets	1,791	(489)	(1,671)
Cease-use liability	(300)	(610)	(418)
Other liabilities	(108)	(39)	—
Accounts payable and accrued liabilities	4,398	9,841	3,698
Net cash used in operating activities	(106,181)	(37,997)	(47,140)
CASH FLOW FROM INVESTING ACTIVITIES			
Purchases of investments	(298,776)	(449,052)	(257,544)
Sales/maturities of investments	415,826	255,123	154,133
Deposits and restricted cash	(92)	40	(388)
Proceeds from sales of property and equipment	13	9	45
Purchases of property and equipment	(4,108)	(1,934)	(1,612)
Net cash (used in) provided by investing activities	112,863	(195,814)	(105,366)
CASH FLOW FROM FINANCING ACTIVITIES			
Issuance of common stock	2,390	276,992	138,731
Net cash provided by financing activities	2,390	276,992	138,731
Net change in cash and cash equivalents	9,072	43,181	(13,775)
Cash and cash equivalents at beginning of the year	74,195	31,014	44,789
Cash and cash equivalents at end of the year	\$ 83,267	\$ 74,195	\$ 31,014
SUPPLEMENTAL DISCLOSURES			
Taxes paid	\$ —	\$ —	\$ —

See accompanying notes.

NEUROCRINE BIOSCIENCES, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2016

NOTE 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business Activities. Neurocrine Biosciences, Inc. (the Company or Neurocrine) was incorporated in California in 1992 and reincorporated in Delaware in 1996. The Company discovers and develops innovative and life-changing pharmaceuticals, in diseases with high unmet medical needs, through its novel research and development (R&D) platform, focused on neurological and endocrine based diseases and disorders. The Company's three lead late-stage clinical programs are elagolix, a gonadotropin-releasing hormone (GnRH) antagonist in Phase III development for endometriosis and uterine fibroids that is partnered with AbbVie Inc. (AbbVie), a vesicular monoamine transporter 2 (VMAT2) inhibitor, INGREZZA™ (valbenazine) for the treatment of movement disorders, and opicapone, a highly-selective catechol-O-methyltransferase inhibitor (COMT inhibitor) that is an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors for adult patients with Parkinson's disease and was inlicensed from BIAL – Portela & CA, S.A. (BIAL). The New Drug Application (NDA) for INGREZZA has been filed with the U.S. Food and Drug Administration (FDA) for tardive dyskinesia and is also currently in Phase II development for Tourette syndrome.

Neurocrine Continental, Inc., is a Delaware corporation and a wholly owned subsidiary of the Company. The Company also has two wholly-owned Irish subsidiaries, Neurocrine Therapeutics, Ltd. and Neurocrine Europe, Ltd. which were formed in December 2014, both of which are inactive.

Principles of Consolidation. The consolidated financial statements include the accounts of Neurocrine as well as its wholly owned subsidiaries. The Company does not have any significant interests in any variable interest entities. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates.

Cash Equivalents. The Company considers all highly liquid investments that are readily convertible into cash and have an original maturity of three months or less at the time of purchase to be cash equivalents.

Short-Term and Long-Term Investments Available-for-Sale. Certain investments are classified as available-for-sale and, in accordance with authoritative guidance, are carried at fair value, with the unrealized gains and losses reported in other comprehensive loss. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in investment income. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in investment income.

Concentration of Credit Risk. Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and investments. The Company has established guidelines to limit its exposure to credit risk by placing investments with high credit quality financial institutions, diversifying its investment portfolio and placing investments with maturities that maintain safety and liquidity.

Collaboration Agreements. Collaborative R&D agreements accounted for all of the Company's revenue for all periods presented.

Property and Equipment. Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets using the straight-line method. Equipment is depreciated over an average estimated

useful life of three to seven years. Leasehold improvements are depreciated over the shorter of their estimated useful lives or the remaining lease term.

Industry Segment and Geographic Information. The Company operates in a single industry segment – the discovery and development of therapeutics for the treatment of neurological and endocrine based diseases and disorders. The Company had no foreign based operations during any of the years presented.

Impairment of Long-Lived Assets. The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. If indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If the carrying amount is not recoverable, the Company measures the amount of any impairment by comparing the carrying value of the asset to the present value of the expected future cash flows associated with the use of the asset.

Fair Value of Financial Instruments. Financial instruments, including cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities, are carried at cost, which management believes approximates fair value because of the short-term maturity of these instruments.

Research and Development Expenses. R&D expenses consist primarily of salaries, payroll taxes, employee benefits, and share-based compensation charges, for those individuals involved in ongoing R&D efforts; as well as scientific contractor fees, preclinical and clinical trial costs, R&D facilities costs, laboratory supply costs, and depreciation of scientific equipment. All such costs are charged to R&D expense as incurred. These expenses result from the Company’s independent R&D efforts as well as efforts associated with collaborations and licensing arrangements. In addition, the Company funds R&D at other companies and research institutions under agreements, which are generally cancelable. The Company reviews and accrues clinical trial expenses based on work performed, which relies on estimates of total costs incurred based on patient enrollment, completion of patient studies and other events. The Company follows this method since reasonably dependable estimates of the costs applicable to various stages of a research agreement or clinical trial can be made. Accrued clinical costs are subject to revisions as trials progress. Revisions are charged to expense in the period in which the facts that give rise to the revision become known.

Share-Based Compensation. The Company estimates the fair value of stock options using the Black-Scholes option pricing model on the date of grant. Restricted stock units are valued based on the closing price of the Company’s common stock on the date of grant. The fair value of equity instruments expected to vest are recognized and amortized on a straight-line basis over the requisite service period of the award, which is generally three to four years; however, certain provisions in the Company’s equity compensation plans provide for shorter vesting periods under certain circumstances. Additionally, the Company has granted certain performance-based equity awards that vest upon the achievement of certain pre-defined Company-specific performance criteria. Expense related to these performance-based equity awards is generally recognized ratably over the performance period once the pre-defined performance based criteria for vesting becomes probable.

Investment Income, net. Investment income, net is comprised of interest and dividends earned on cash, cash equivalents and investments as well as gains and losses realized from activity in the Company’s investment portfolio. The following table presents certain information related to the components of investment income (in thousands):

	<u>Years Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Interest income	\$2,838	\$1,928	\$629
Realized gains, net	—	—	—
Total	<u>\$2,838</u>	<u>\$1,928</u>	<u>\$629</u>

Net Loss Per Share. The Company computes basic net loss per share using the weighted average number of common shares outstanding during the period. Diluted net income per share is based upon the weighted average number of common shares and potentially dilutive securities (common share equivalents) outstanding during the period. Common share equivalents outstanding, determined using the treasury stock method, are comprised of shares that may be issued under the Company's stock option agreements. Common share equivalents are excluded from the diluted net loss per share calculation because of their anti-dilutive effect.

Due to the Company's net loss position in 2016, 2015 and 2014, approximately 3.8 million, 4.1 million and 2.9 million, respectively, of common share equivalents were excluded from the diluted common shares outstanding. For the years ended December 31, 2016, 2015 and 2014, there were employee stock options, calculated on a weighted average basis, to purchase 0.4 million, 0.1 million, and 1.0 million shares of our common stock with an exercise price greater than the average market price of the underlying common shares.

Impact of Recently Issued Accounting Standards. In May 2014, the Financial Accounting Standards Board (FASB) amended the existing accounting standards for revenue recognition, which outlines a comprehensive revenue recognition model and supersedes most current revenue recognition guidance. The new standard requires a company to recognize revenue upon transfer of goods or services to a customer at an amount that reflects the expected consideration to be received in exchange for those goods or services. The amended guidance defines a five-step approach for recognizing revenue, which may require us to use more judgment and make more estimates than under the current guidance. The new standard allows for two methods of adoption: (a) full retrospective adoption, meaning the standard is applied to all periods presented, or (b) modified retrospective adoption, meaning the cumulative effect of applying the new standard is recognized as an adjustment to the opening retained earnings balance. The amended guidance as currently issued will be effective in 2018, however early adoption is permitted.

The Company is currently evaluating the impact of the new standard on historical revenue recorded for its two collaboration agreements. Additionally, the Company has no historical pharmaceutical product revenue and could potentially generate initial pharmaceutical product revenue in 2017. The ongoing evaluation is dependent upon the outcome of several items that are not related to the assessment of our two contracts as well as the resolution of certain questions relating to the application of, and transition to, the new revenue recognition guidance for collaboration agreements. The Company anticipates that its evaluation will be completed in the first quarter of 2017. It is weighing adopting the new standard in the first quarter of 2017, but the ultimate decision as to whether to adopt and the method of adoption are dependent upon the finalization of the outstanding items noted above. The Company will then determine the ultimate timing of adoption and adoption method as well as the ultimate impact the adoption of this standard will have on its consolidated financial statements. Based on the Company's current assessment of the effect of the new standard on historical revenue under its collaboration agreements that is related to contingent payments, which are not dependent on performance by them, it believes revenue could potentially be recognized earlier than historically recorded if information is available to allow the Company to record the payments without the risk of a future reversal.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. The new ASU disclosure requirement explicitly requires management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. In connection with each annual and interim period, management will assess if there is substantial doubt about an entity's ability to continue as a going concern within one year after the issuance date by considering relevant conditions that are known (and reasonably knowable) at the issuance date. If significant doubt exists, management will need to assess if its plans will or will not alleviate substantial doubt in order to determine the specific disclosures. The Company adopted the ASU during 2016, the adoption of this standard did not have a material impact on the Company's financial statements.

In January 2016 the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. This new standard amends certain

aspects of accounting and disclosure requirements of financial instruments, including the requirement that equity investments with readily determinable fair values be measured at fair value with changes in fair value recognized in our results of operations. This new standard does not apply to investments accounted for under the equity method of accounting or those that result in consolidation of the investee. Equity investments that do not have readily determinable fair values may be measured at fair value or at cost minus impairment adjusted for changes in observable prices. A financial liability that is measured at fair value in accordance with the fair value option is required to be presented separately in other comprehensive income for the portion of the total change in the fair value resulting from change in the instrument-specific credit risk. In addition, a valuation allowance should be evaluated on deferred tax assets related to available-for-sale debt securities in combination with other deferred tax assets. This new standard will be effective January 1, 2018. The adoption of this standard is not expected to have a material impact on the Company's financial position or results of operations.

In February 2016, the FASB issued Accounting Standards Update 2016-02, Leases. This update amends the current accounting guidance for lease transactions. Under the new guidance, a lessee will be required to recognize both assets and liabilities for any leases in excess of twelve months. Additionally, certain qualitative and quantitative disclosures will also be required in the financial statements. We are required to adopt this new guidance beginning in 2019 and early adoption is permitted. The Company is in the process of determining the effects this update will have on its consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This update amends the current tax accounting rules for share-based compensation in an attempt to simplify the reporting of excess tax benefits and deficiencies related to equity compensation. Additionally, the FASB has provided an alternative for forfeiture estimations related to grants of equity awards. The Company elected to early adopt this new guidance for 2016. The adoption of this update did not have a significant effect on the consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash", which clarifies the presentation of restricted cash and restricted cash equivalents in the statements of cash flows. Under the ASU, restricted cash and restricted cash equivalents are included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts presented on the statements of cash flows. The ASU is intended to reduce diversity in practice in the classification and presentation of changes in restricted cash on the Consolidated Statement of Cash Flows. The ASU requires that the Consolidated Statement of Cash Flows explain the change in total cash and equivalents and amounts generally described as restricted cash or restricted cash equivalents when reconciling the beginning-of-period and end-of-period total amounts. The ASU also requires a reconciliation between the total of cash and equivalents and restricted cash presented on the Consolidated Statement of Cash Flows and the cash and equivalents balance presented on the Consolidated Balance Sheet. The ASU is effective retrospectively on January 1, 2018, with early adoption permitted. The Company does not expect the adoption of the ASU to have a material effect on its results of operations, financial condition or cash flows.

NOTE 2. REVENUE RECOGNITION AND SIGNIFICANT COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

Revenue Recognition Policy. The Company recognizes revenue for the performance of services when each of the following four criteria is met: (i) persuasive evidence of an arrangement exists; (ii) services are rendered or products are delivered; (iii) the sales price is fixed or determinable; and (iv) collectability is reasonably assured.

Since 2011, the Company has followed the Accounting Standards Codification (ASC) for Revenue Recognition – Multiple-Element Arrangements, if applicable, to determine the recognition of revenue under license and collaboration agreements. The terms of these agreements generally contain multiple elements, or deliverables, which may include (i) licenses to the Company's intellectual property, (ii) materials and

technology, (iii) pharmaceutical supply, (iv) participation on joint development or joint steering committees, and (v) development services. The payments the Company receives under these arrangements typically include one or more of the following: up-front license fees; funding of research and/or development efforts; amounts due upon the achievement of specified milestones; manufacturing and royalties on future product sales.

The ASC provides guidance relating to the separation of deliverables included in an arrangement into different units of accounting and the allocation of consideration to the units of accounting. The evaluation of multiple-element arrangements requires management to make judgments about (i) the identification of deliverables, (ii) whether such deliverables are separable from the other aspects of the contractual relationship, (iii) the estimated selling price of each deliverable, and (iv) the expected period of performance for each deliverable.

To determine the units of accounting under a multiple-element arrangement, management evaluates certain separation criteria, including whether the deliverables have stand-alone value, based on the relevant facts and circumstances for each arrangement. The selling prices of deliverables under an arrangement may be derived using vendor specific objective evidence (VSOE), third-party evidence, or a best estimate of selling price (BESP), if VSOE or third-party evidence is not available. For most pharmaceutical licensing and collaboration agreements, BESP is utilized. The objective of BESP is to determine the price at which the Company would transact a sale if the element within the agreement was sold on a standalone basis. Establishing BESP involves management's judgment and considers multiple factors, including market conditions and company-specific factors, including those factors contemplated in negotiating the agreements, as well as internally developed models that include assumptions related to market opportunity, discounted cash flows, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the agreement. In validating the BESP, management considers whether changes in key assumptions used to determine the BESP will have a significant effect on the allocation of the arrangement consideration between the multiple deliverables. The allocated consideration for each unit of accounting is recognized over the related obligation period in accordance with the applicable revenue recognition criteria.

If there are deliverables in an arrangement that are not separable from other aspects of the contractual relationship, they are treated as a combined unit of accounting, with the allocated revenue for the combined unit recognized in a manner consistent with the revenue recognition applicable to the final deliverable in the combined unit. Payments received prior to satisfying the relevant revenue recognition criteria are recorded as unearned revenue in the accompanying balance sheets and recognized as revenue when the related revenue recognition criteria are met.

The Company typically receives up-front payments when licensing its intellectual property, which often occurs in conjunction with a R&D agreement. The Company recognizes revenue attributed to the license upon delivery, provided that the license has stand-alone value.

For payments payable on achievement of milestones that do not meet all of the conditions to be considered substantive, the Company recognizes the portion of the payment allocable to delivered items as revenue when the specific milestone is achieved, and the contingency is removed.

Prior to the revised multiple element guidance described above, adopted by the Company on January 1, 2011, upfront, nonrefundable payments for license fees, grants, and advance payments for sponsored research revenues received in excess of amounts earned were classified as deferred revenue and recognized as income over the contract or development period. Revenues from development milestones are accounted for in accordance with the Revenue Recognition – Milestone Method Topic of the FASB ASC (Milestone Method). Milestones are recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence that the milestone has been achieved, provided that the milestone event is substantive. A milestone event is considered to be substantive if its achievability was not reasonably assured at the inception of the agreement and the Company's efforts led to the achievement of the milestone or the milestone was due upon the

occurrence of a specific outcome resulting from the Company's performance. The Company assesses whether a milestone is substantive at the inception of each agreement.

Mitsubishi Tanabe Pharma Corporation (Mitsubishi Tanabe). During 2015, the Company entered into a collaboration and license agreement with Mitsubishi Tanabe for the development and commercialization of INGREZZA for movement disorders in Japan and other select Asian markets. Payments to the Company under this agreement include an up-front license fee of \$30 million, up to \$85 million in development and commercialization event-based payments, payments for the manufacture of pharmaceutical products, and royalties on product sales in select territories in Asia. Under the terms of the agreement, Mitsubishi Tanabe is responsible for all third-party development, marketing and commercialization costs in Japan and other select Asian markets with the exception of a single Huntington's chorea clinical trial to be performed by the Company, at an estimated cost of approximately \$12 million, should Mitsubishi Tanabe request the clinical trial. The Company will be entitled to a percentage of sales of INGREZZA in Japan and other select Asian markets for the longer of ten years or the life of the related patent rights.

Under the terms of the Company's agreement with Mitsubishi Tanabe, the collaboration effort between the parties to advance INGREZZA towards commercialization in Japan and other select Asian markets is governed by a joint steering committee and joint development committee with representatives from both the Company and Mitsubishi Tanabe. There are no performance, cancellation, termination or refund provisions in the agreement that would have a material financial consequence to the Company. The Company does not directly control when event-based payments will be achieved or when royalty payments will begin. Mitsubishi Tanabe may terminate the agreement at its discretion upon 180 days' written notice to the Company. In such event, all INGREZZA product rights for Japan and other select Asian markets would revert to the Company.

The Company has identified the following deliverables associated with the Mitsubishi Tanabe agreement: INGREZZA technology license and existing know-how, development activities to be performed as part of the collaboration, and the manufacture of pharmaceutical products. The respective standalone value from each of these deliverables has been determined by applying the BSP method and the revenue was allocated based on the relative selling price method with revenue recognition timing to be determined either by delivery or the provision of services.

As discussed above, the BSP method required the use of significant estimates. The Company used an income approach to estimate the selling price for the technology license and an expense approach for estimating development activities and the manufacture of pharmaceutical products. The development activities and the manufacture of pharmaceutical products are expected to be delivered throughout the duration of the agreement. The technology license and existing know-how was delivered on the effective date of the agreement.

For the year ended December 31, 2015, the Company recognized revenue under this agreement of \$19.8 million associated with the delivery of a technology license and existing know-how. In accordance with the Company's continuing performance obligations, \$10.2 million of the \$30 million up-front payment is being deferred and recognized in future periods. Under the terms of the agreement, there is no general obligation to return the up-front payment for any non-contingent deliverable. No revenue was recognized under the Mitsubishi Tanabe agreement for the year ended December 31, 2016.

The Company evaluated the event-based payments under the Milestone Method and concluded only one immaterial event-based payment represents a substantive milestone. Event-based payments will be recognized when earned.

The Company is eligible to receive from Mitsubishi Tanabe tiered royalty payments based on product sales in Japan and other select Asian markets. Royalties will be recognized as earned in accordance with the terms of the agreement, when product sales are reported by Mitsubishi Tanabe, the amount can be reasonably estimated, and collectability is reasonably assured.

AbbVie Inc. (AbbVie). In June 2010, the Company announced an exclusive worldwide collaboration with AbbVie, to develop and commercialize elagolix and all next-generation GnRH antagonists (collectively, GnRH Compounds) for women’s and men’s health. AbbVie made an upfront payment of \$75 million and has agreed to make additional development and regulatory event based payments of up to \$480 million, of which \$45 million has been received to date, and up to an additional \$50 million in commercial event based payments. The Company has assessed event based payments under the revised authoritative guidance for research and development milestones and determined that event based payments prior to commencement of a Phase III clinical study, as defined in the agreement, meet the definition of a milestone in accordance with authoritative guidance as (1) they are events that can only be achieved in part on the Company’s past performance, (2) there is substantive uncertainty at the date the arrangement was entered into that the event will be achieved and (3) they result in additional payments being due to the Company. Development and regulatory event based payments subsequent to the commencement of a Phase III clinical study, however, currently do not meet these criteria as their achievement is based on the performance of AbbVie. As of December 31, 2016, \$485 million remains outstanding in future event based payments under the agreement as the performance is based solely on AbbVie. However, none of the remaining event based payments meet the definition of a milestone in accordance with authoritative accounting guidance and will be recognized when earned.

Under the terms of the agreement, AbbVie is responsible for all third-party development, marketing and commercialization costs. The Company will be entitled to a percentage of worldwide sales of GnRH Compounds for the longer of ten years or the life of the related patent rights. AbbVie may terminate the collaboration at its discretion upon 180 days’ written notice to the Company. In such event, the Company would be entitled to specified payments for ongoing clinical development and related activities and all GnRH Compound product rights would revert to the Company. During 2016, event-based revenue of \$15.0 million was recognized related to AbbVie’s initiation of Phase III development of elagolix in uterine fibroids. No revenue was recognized during 2015 or 2014 under this collaboration agreement.

NOTE 3. INVESTMENTS

Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in comprehensive loss. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in investment income. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in investment income.

Investments at December 31, 2016 and 2015 consisted of the following (in thousands):

	Years Ended December 31,	
	2016	2015
Certificates of deposit	\$ 960	\$ 10,078
Commercial paper	49,245	23,955
Corporate debt securities	204,436	323,219
Securities of government-sponsored entities	12,932	30,232
Total investments	<u>\$267,573</u>	<u>\$387,484</u>

The following is a summary of investments classified as available-for-sale securities (in thousands):

	<u>Contractual Maturity (in years)</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains(1)</u>	<u>Gross Unrealized Losses(1)</u>	<u>Aggregate Estimated Fair Value</u>
December 31, 2016:					
Classified as current assets:					
Certificates of deposit	Less than 1	\$ 960	\$—	\$ —	\$ 960
Commercial paper	Less than 1	49,280	3	(38)	49,245
Corporate debt securities	Less than 1	168,548	3	(117)	168,434
Securities of government-sponsored entities	Less than 1	5,448	—	(4)	5,444
Total short-term available-for-sale securities		<u>\$224,236</u>	<u>\$ 6</u>	<u>\$(159)</u>	<u>\$224,083</u>
Classified as non-current assets:					
Corporate debt securities	1 to 2	\$ 36,149	\$—	\$(147)	\$ 36,002
Securities of government-sponsored entities	1 to 2	7,506	—	(18)	7,488
Total long-term available-for-sale securities		<u>\$ 43,655</u>	<u>\$—</u>	<u>\$(165)</u>	<u>\$ 43,490</u>
December 31, 2015:					
Classified as current assets:					
Certificates of deposit	Less than 1	\$ 9,120	\$ 1	\$ (1)	\$ 9,120
Commercial paper	Less than 1	23,965	1	(11)	23,955
Corporate debt securities	Less than 1	254,592	1	(414)	254,179
Securities of government-sponsored entities	Less than 1	17,762	1	(21)	17,742
Total short-term available-for-sale securities		<u>\$305,439</u>	<u>\$ 4</u>	<u>\$(447)</u>	<u>\$304,996</u>
Classified as non-current assets:					
Certificates of deposit	1 to 2	\$ 960	\$—	\$ (2)	\$ 958
Corporate debt securities	1 to 2	69,528	—	(488)	69,040
Securities of government-sponsored entities	1 to 2	12,534	—	(44)	12,490
Total long-term available-for-sale securities		<u>\$ 83,022</u>	<u>\$—</u>	<u>\$(534)</u>	<u>\$ 82,488</u>

(1) Unrealized gains and losses are included in other comprehensive loss.

The following table presents gross unrealized losses and fair value for those available-for-sale investments that were in an unrealized loss position as of December 31, 2016 and 2015, aggregated by investment category and length of time that individual securities have been in a continuous loss position (in thousands):

	Less Than 12 Months		12 Months or Greater		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
December 31, 2016:						
Commercial paper	\$ 43,781	\$ (38)	\$ —	\$ —	\$ 43,781	\$ (38)
Corporate debt securities	185,243	(261)	9,144	(3)	194,387	(264)
Securities of government-sponsored entities	12,932	(22)	—	—	12,932	(22)
Total	<u>\$241,956</u>	<u>\$(321)</u>	<u>\$9,144</u>	<u>\$ (3)</u>	<u>\$251,100</u>	<u>\$(324)</u>
December 31, 2015:						
Certificates of deposit	\$ 5,517	\$ (3)	\$ —	\$ —	\$ 5,517	\$ (3)
Commercial paper	16,959	(11)	—	—	16,959	(11)
Corporate debt securities	310,160	(880)	5,521	(22)	315,681	(902)
Securities of government-sponsored entities	25,913	(65)	—	—	25,913	(65)
Total	<u>\$358,549</u>	<u>\$(959)</u>	<u>\$5,521</u>	<u>\$(22)</u>	<u>\$364,070</u>	<u>\$(981)</u>

NOTE 4. FAIR VALUE MEASUREMENTS

Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a three-tier fair value hierarchy has been established, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable inputs such as quoted prices in active markets;
- Level 2: Inputs include quoted prices for similar instruments in active markets and/or quoted prices for identical or similar instruments in markets that are not active near the measurement date; and
- Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The Company classifies its cash equivalents and available for sale investments within Level 1 or Level 2. The fair value of the Company's high quality investment grade corporate debt securities is determined using proprietary valuation models and analytical tools. These valuation models and analytical tools use market pricing or prices for similar instruments that are both objective and publicly available, including matrix pricing or reported trades, benchmark yields, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids and/or offers. The Company did not reclassify any investments between levels in the fair value hierarchy during the years ended December 31, 2016 and 2015.

The Company's assets which are measured at fair value on a recurring basis as of December 31, 2016 and 2015 were determined using the inputs described above (in millions):

	Fair Value Measurements Using			
	Carrying Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2016:				
Classified as current assets:				
Cash and money market funds	\$ 73.6	\$ 73.6	\$ —	\$—
Certificates of deposit	1.0	1.0	—	—
Commercial paper	49.2	—	49.2	—
Securities of government-sponsored entities	5.4	—	5.4	—
Corporate debt securities	<u>178.1</u>	<u>—</u>	<u>178.1</u>	<u>—</u>
Subtotal	307.3	74.6	232.7	—
Classified as long-term assets:				
Certificates of deposit	4.9	4.9	—	—
Securities of government-sponsored entities	7.5	—	7.5	—
Corporate debt securities	<u>36.0</u>	<u>—</u>	<u>36.0</u>	<u>—</u>
Total	355.7	79.5	276.2	—
Less cash, cash equivalents and restricted cash				
	<u>(88.1)</u>	<u>(78.5)</u>	<u>(9.6)</u>	<u>—</u>
Total investments	<u>\$267.6</u>	<u>\$ 1.0</u>	<u>\$266.6</u>	<u>\$—</u>
December 31, 2015:				
Classified as current assets:				
Cash and money market funds	\$ 69.5	\$ 69.5	\$ —	\$—
Certificates of deposit	9.1	9.1	—	—
Commercial paper	24.0	—	24.0	—
Securities of government-sponsored entities	17.7	—	17.7	—
Corporate debt securities	<u>259.0</u>	<u>—</u>	<u>259.0</u>	<u>—</u>
Subtotal	379.3	78.6	300.7	—
Classified as long-term assets:				
Certificates of deposit	5.7	5.7	—	—
Securities of government-sponsored entities	12.5	—	12.5	—
Corporate debt securities	<u>69.0</u>	<u>—</u>	<u>69.0</u>	<u>—</u>
Total	466.5	84.3	382.2	—
Less cash, cash equivalents and restricted cash				
	<u>(79.0)</u>	<u>(74.2)</u>	<u>(4.8)</u>	<u>—</u>
Total investments	<u>\$387.5</u>	<u>\$ 10.1</u>	<u>\$377.4</u>	<u>\$—</u>

NOTE 5. PROPERTY AND EQUIPMENT

Property and equipment, net, at December 31, 2016 and 2015 consisted of the following (in thousands):

	<u>2016</u>	<u>2015</u>
Tenant improvements	1,530	1,335
Furniture and fixtures	942	837
Equipment	29,749	28,121
	<u>32,221</u>	<u>30,293</u>
Less accumulated depreciation	(25,950)	(26,861)
Property and equipment, net	<u>\$ 6,271</u>	<u>\$ 3,432</u>

For each of the years ended December 31, 2016, 2015 and 2014, depreciation expense was \$1.5 million, \$1.0 million and \$0.8 million, respectively. During 2016, 2015 and 2014, the Company recognized a gain/(loss) of approximately \$8,000, \$9,000 and (\$4,000), respectively, related to disposal of capital equipment.

NOTE 6. ACCRUED LIABILITIES

Accrued liabilities at December 31, 2016 and 2015 consisted of the following (in thousands):

	<u>2016</u>	<u>2015</u>
Accrued employee related costs	\$ 9,559	\$ 7,358
Accrued development costs	5,543	7,359
Other accrued liabilities	5,995	4,317
	<u>\$21,097</u>	<u>\$19,034</u>

NOTE 7. COMMITMENTS AND CONTINGENCIES

Real Estate. In December 2007, the Company closed the sale of its facility and associated real property for a purchase price of \$109 million. Concurrent with the sale, the Company retired the entire \$47.7 million in mortgage debt previously outstanding with respect to the facility and associated real property, and received cash of \$61.0 million net of transaction costs and debt retirement.

Upon the closing of the sale of the facility and associated real property, the Company entered into a lease agreement (Lease) whereby it leased back for an initial term of 12 years its corporate headquarters comprised of two buildings located at 12790 El Camino Real (Front Building) and 12780 El Camino Real (Rear Building) in San Diego, California. The Company also entered into a series of lease amendments (Amendments), beginning in late 2008, through which it vacated the Front Building, but continues to occupy the Rear Building. The ultimate result of this real estate sale was a net gain of \$39.1 million which was deferred in accordance with authoritative guidance. For the years ended December 31, 2016, 2015 and 2014, the Company recognized \$3.4 million, \$3.3 million and \$3.2 million, respectively, of the deferred gain and will recognize the remaining \$10.9 million of the deferred gain over the initial Lease term which will expire at the end of 2019.

Under the terms of the Lease and the Amendments, the Company pays base annual rent (subject to an annual fixed percentage increase), plus a 3.5% annual management fee, property taxes and other normal and necessary expenses associated with the Lease such as utilities, repairs and maintenance. In lieu of a cash security deposit under the Lease, Wells Fargo Bank, N.A. issued on the Company's behalf a letter of credit in the amount of \$4.6 million, which is secured by a deposit of equal amount with the same bank. The Company also has the right to extend the Lease for two consecutive ten-year terms.

As of December 31, 2016, the Company has one sublease agreement for approximately 16,000 square feet of the Rear Building. This sublease is expected to result in approximately \$0.6 million of rental income in 2017 with this sublease rental income being recorded as an offset to rent expense. The income generated under this sublease is lower than the Company's financial obligation under the Lease for the Rear Building, as determined on a per square foot basis. Consequently, at the inception of such a sublease, or in association with an amendment to such sublease, the Company is required to record a cease-use liability for the net present value of the estimated difference between the expected income to be generated under the sublease and future subleases and the Lease obligation over the remaining term of the Lease for the space that is occupied by the subtenant. During 2016, the Company terminated another previously existing sublease and began to reoccupy the related space to allow for expansion. This resulted in reversal of cease use expense of approximately \$0.8 million and a corresponding increase in deferred rent of approximately \$0.2 million during 2016. The remaining sublease expires in March 2018, however it provides an option to extend for an additional one-year renewal period.

The following table sets forth changes to the accrued cease-use liability during 2016 and 2015 (in thousands):

	Years Ended December 31,	
	2016	2015
Beginning balance	\$1,983	\$2,678
Change in estimate	(830)	(85)
Payments	(300)	(610)
Ending balance	<u>\$ 853</u>	<u>\$1,983</u>

Rent Expense. Gross rent expense was approximately \$6.0 million for each of the years ended December 31, 2016, 2015 and 2014, respectively. For financial reporting purposes, the Company recognizes rent expense on a straight-line basis over the term of the lease. Accordingly, rent expense recognized in excess of rent paid is reflected as a liability in the accompanying consolidated balance sheets.

Lease Commitments. The Company leases its office and research laboratories under an operating lease with an initial term of twelve years, expiring at the end of 2019. Additionally, the Company's facility lease agreement calls for it to maintain \$50 million in cash and investments at all times, or to increase the security deposit by \$5 million.

As of December 31, 2016, the total estimated future annual minimum lease payments under the Company's non-cancelable building lease for the years ending after December 31, 2016 were as follows (in thousands):

	Payment Amount
2017	\$ 7,834
2018	8,070
2019	8,311
2020	—
2021 and thereafter	—
Total future minimum lease payments	<u>\$24,215</u>

Product Liability. The Company's business exposes it to liability risks from its potential drug products. A successful product liability claim or series of claims brought against the Company could result in payment of significant amounts of money and divert management's attention from running the business. The Company may not be able to maintain insurance on acceptable terms, or the insurance may not provide adequate protection in the case of a product liability claim. To the extent that product liability insurance, if available, does not cover potential claims, the Company would be required to self-insure the risks associated with such claims. The Company believes that it carries reasonably adequate insurance for product liability claims.

Licensing and Research Agreements. The Company has entered into inlicensing agreements with various universities and research organizations, which are generally cancelable at the option of the Company with terms ranging from 0-180 days written notice. Under the terms of these agreements, the Company has received licenses to research tools, know-how and technology claimed, in certain patents or patent applications. The Company is required to pay fees, milestones and/or royalties on future sales of products employing the technology or falling under claims of a patent, and some of the agreements require minimum royalty payments. Some of the agreements also require the Company to pay expenses arising from the prosecution and maintenance of the patents covering the inlicensed technology. The Company continually reassesses the value of the license agreements and cancels them when research efforts are discontinued on these programs. As of December 31, 2016, all inlicensed and research candidates are successfully developed, the Company may be required to pay milestone payments of approximately \$17 million over the lives of these agreements, in addition to royalties on sales of the affected products at rates ranging up to 5%. Due to the uncertainties of the development process, the timing and probability of the milestone and royalty payments cannot be accurately estimated.

Litigation. From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. On December 1, 2015, Icahn School of Medicine at Mount Sinai (Mount Sinai) filed a complaint against the Company in the United States District Court for the Southern District of New York: Icahn School of Medicine at Mount Sinai v. Neurocrine Biosciences, Inc., Case No. 1:15-cv-09414. In the complaint, Mount Sinai alleges that the Company, by entering into an exclusive worldwide collaboration with AbbVie to develop and commercialize next-generation GnRH antagonists, breached a license agreement with Mount Sinai dated August 27, 1999 (Mount Sinai License). Mount Sinai is seeking unspecified monetary damages, future sublicensing fees and attorney's fees. In January 2016, the Company filed a motion to dismiss this complaint in its entirety. In June 2016, the Court denied the motion in part and granted the motion in part, ruling that while Mount Sinai could continue its lawsuit against the Company, there was no requirement by the Company to obtain Mount Sinai's consent prior to licensing the next-generation GnRH antagonists to AbbVie. In July 2016, the Company filed its answer denying Mount Sinai's allegations, and filed counterclaims against Mount Sinai alleging patent misuse, non-infringement of Mount Sinai's patents, and that Mount Sinai's patents that are subject to the Mount Sinai License are invalid. Mount Sinai has filed a motion to dismiss the Company's counterclaims and affirmative defenses. The Company believes that it has meritorious defenses to the claims made in the complaint and intends to vigorously defend against such claims, but is not able to predict the ultimate outcome of this action, or estimate any potential loss.

The Company is not aware of any other proceedings or claims that it believes will have, individually or in the aggregate, a material adverse effect on its business, financial condition or results of operations.

NOTE 8. SHARE-BASED COMPENSATION

Share-Based Compensation Plans. In May 2011, the Company adopted the Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan (the 2011 Plan) pursuant to which 15.5 million shares of Company common stock are authorized for issuance. The 2011 Plan provides for the grant of stock options that qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended (the Code), nonstatutory stock options, restricted stock awards, restricted stock unit awards (RSUs), stock appreciation rights, performance stock awards, performance-based restricted stock units (PRSUs) and other forms of equity compensation.

The Company also issues stock options under the Neurocrine Biosciences, Inc. Inducement Plan (Inducement Plan) to certain executive level employees. During 2015 and 2014, 120,000 and 160,000 stock options, respectively, and during 2015 50,000 RSUs were granted pursuant to such inducement plan. The Company did not grant any options pursuant to the Inducement Plan during 2016. These stock option grants have a four year vesting period and the RSUs have a three year cliff vesting period. The Company currently has approximately 0.2 million in stock options and RSUs outstanding under this Inducement Plan.

As of December 31, 2016, approximately 6.7 million shares of common stock remained available for the future grant of awards under the 2011 Plan. Only share awards made under the 2011 Plan that are subsequently cancelled due to forfeiture or expiration are returned to the share pool available for future grants.

The Company issues new shares upon the exercise of stock options, the issuance of stock bonus awards and vesting of RSUs and PRSUs, and has 14.1 million shares of common stock reserved for such issuance as of December 31, 2016.

Vesting Provisions of Share-Based Compensation. Stock options generally have terms from seven to ten years from the date of grant, and generally vest over a three to four-year period. The maximum contractual term for all options granted from the 2011 Plan is ten years. RSUs granted under the 2011 Plan generally have vesting periods of four years. PRSUs granted under the 2011 Plan vest based on the achievement of certain pre-defined Company-specific performance criteria and expire four to five years from the grant date.

Share-Based Compensation. The compensation cost that has been included in the statement of comprehensive loss for all share-based compensation arrangements is as follows (in thousands):

	<u>Years Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
General and administrative expense	\$16,770	\$15,281	\$ 5,167
Research and development expense	11,694	13,111	5,215
Share-based compensation expense	<u>\$28,464</u>	<u>\$28,392</u>	<u>\$10,382</u>

Authoritative guidance requires that cash flows resulting from tax deductions in excess of the cumulative compensation cost recognized for options exercised be classified as cash inflows provided by financing activities and cash outflows used in operating activities. Due to the Company's net tax loss position, no tax benefits have been recognized in the consolidated statements of cash flows.

Stock Options. The exercise price of all options granted during the years ended December 31, 2016, 2015 and 2014 was equal to the closing price of the Company's common stock on the date of grant. The estimated fair value of each option award granted was determined on the date of grant using the Black-Scholes option-pricing valuation model with the following weighted-average assumptions for option grants during the three years ended December 31, 2016:

	<u>Years Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Risk-free interest rate	1.4%	1.7%	2.2%
Expected volatility of common stock	60%	66%	71%
Dividend yield	0.0%	0.0%	0.0%
Expected option term	5.6 years	6.6 years	7.2 years

The Company estimates the fair value of stock options using a Black-Scholes option-pricing model on the date of grant. The fair value of equity instruments that are ultimately expected to vest, net of estimated forfeitures, are recognized and amortized on a straight-line basis over the requisite service period. The Black-Scholes option-pricing model incorporates various and highly sensitive assumptions including expected volatility, expected term and interest rates. The expected volatility is based on the historical volatility of the Company's common stock over the most recent period commensurate with the estimated expected term of the Company's stock options. The expected option term is estimated based on historical experience as well as the status of the employee. For example, directors and officers have a longer expected option term than all other employees. The risk-free rate for periods within the contractual life of the option is based upon observed interest rates appropriate for the expected term of the Company's employee stock options. The Company has never declared or paid dividends and has no plans to do so in the foreseeable future.

Authoritative guidance requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Pre-vesting forfeitures for awards with monthly vesting terms were estimated to be 0% in 2016 based on historical experience. Pre-vesting forfeitures for awards with annual vesting terms were also estimated at 0% in 2016 based on historical employee turnover experience. The effect of past restructurings has been excluded from the historical review of employee turnover. The effect of pre-vesting forfeitures for awards has historically been negligible on the Company's recorded expense. The Company's determination of fair value is affected by the Company's stock price as well as a number of assumptions that require judgment. The weighted-average fair values of options granted during the years ended December 31, 2016, 2015 and 2014, estimated as of the grant date using the Black-Scholes option valuation model, were \$21.49, \$23.24 and \$12.57, respectively.

A summary of the status of the Company's stock options as of December 31, 2016, 2015 and 2014 and of changes in options outstanding under the plans during the three years ended December 31, 2016 is as follows (in thousands, except for weighted average exercise price data):

	2016		2015		2014	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at January 1	5,507	\$15.63	5,750	\$ 9.31	5,853	\$ 7.54
Granted	1,077	40.19	1,159	37.21	1,089	18.41
Exercised	(341)	7.60	(1,315)	5.01	(1,135)	6.50
Canceled	(131)	34.35	(87)	46.08	(57)	56.83
Outstanding at December 31	<u>6,112</u>	<u>\$20.01</u>	<u>5,507</u>	<u>\$15.63</u>	<u>5,750</u>	<u>\$ 9.31</u>

Options outstanding at December 31, 2016 have a weighted average remaining contractual term of 6.5 years.

For the year ended December 31, 2016, 2015 and 2014 share-based compensation expense related to stock options was \$18.4 million, \$13.6 million and \$7.8 million, respectively. As of December 31, 2016, there was approximately \$32.6 million of unamortized compensation cost related to stock options, which is expected to be recognized over a weighted average remaining vesting period of approximately 2.5 years. As of December 31, 2016, there were approximately 4.5 million options exercisable with a weighted average exercise price of \$14.55 and a weighted-average remaining contractual term of 5.7 years. The total intrinsic value, which is the amount by which the exercise price was exceeded by the sale price of the Company's common stock on the date of sale, of stock option exercises during the years ended December 31, 2016, 2015, and 2014 was \$13.2 million, \$43.6 million and \$14.3 million, respectively. As of December 31, 2016, the total intrinsic value of options outstanding and exercisable was \$119.9 million and \$110.2 million, respectively. Cash received from stock option exercises for the years ended December 31, 2016, 2015 and 2014 was \$2.4 million, \$6.3 million and \$5.6 million, respectively.

Restricted Stock Units. The fair value of RSUs is based on the closing sale price of the Company's common stock on the date of issuance. The total number of RSUs expected to vest is adjusted by estimated forfeiture rates, which has been based on historical experience of equity awards and historical employee turnover experience. The effect of pre-vesting forfeitures for awards has historically been negligible on the Company's recorded expense and was estimated at 0% in 2016. The effect of past restructurings has been excluded from the historical review of employee turnover. For the year ended December 31, 2016, 2015 and 2014, share-based compensation expense related to RSUs was \$8.3 million, \$6.0 million, and \$2.6 million, respectively. As of December 31, 2016, there was approximately \$17.8 million of unamortized compensation cost related to RSUs, which is expected to be recognized over a weighted average remaining vesting period of approximately 2.5 years.

The total intrinsic value of RSUs converted into common shares during the years ended December 31, 2016, 2015 and 2014 was \$12.2 million, \$5.7 million, and \$1.7 million, respectively. The RSUs, at the election of

eligible employees, may be subject to deferred delivery arrangement. The total intrinsic value of RSUs outstanding at December 31, 2016 was \$34.2 million based on the Company's closing stock price on that date.

A summary of the status of the Company's RSUs as of December 31, 2016, 2015 and 2014 and of changes in RSUs outstanding under the plans for the three years ended December 31, 2016 is as follows (in thousands, except for weighted average grant date fair value per unit):

	2016		2015		2014	
	Number of Units	Weighted Average Grant Date Fair Value per Unit	Number of Units	Weighted Average Grant Date Fair Value per Unit	Number of Units	Weighted Average Grant Date Fair Value per Unit
Outstanding at						
January 1	910	\$24.23	669	\$15.01	373	\$ 8.65
Granted	326	36.73	448	33.62	389	19.59
Cancelled	(69)	32.50	(16)	20.83	—	—
Converted into						
common shares	(284)	20.71	(191)	14.24	(93)	8.65
Outstanding at						
December 31	<u>883</u>	<u>\$29.33</u>	<u>910</u>	<u>\$24.23</u>	<u>669</u>	<u>\$15.01</u>

Performance-Based Restricted Stock Units. During the years ended December 31, 2016, 2015 and 2014, the Company granted approximately 230,000, 50,000 and 475,000 PRSUs, respectively, that vest based on the achievement of certain pre-defined Company-specific performance criteria and expire approximately four to five years from the grant date. The fair value of PRSUs is estimated based on the closing sale price of the Company's common stock on the date of grant. Expense recognition for PRSUs commences when attainment of the performance based criteria is determined to be probable. During 2016, 2015 and 2014, the Company recognized approximately \$1.8 million, \$8.8 million and \$0 in expense related to PRSUs. At December 31, 2016, the total unrecognized estimated compensation expense related to these PRSUs was \$8.0 million. The total intrinsic value of PRSUs converted into common shares during the year ended December 31, 2016 and 2015 was \$0 million and \$14.9 million, respectively. The total intrinsic value of PRSUs outstanding at December 31, 2016 was \$16.3 million based on the Company's closing stock price on that date.

NOTE 9. STOCKHOLDERS' EQUITY

Equity Financing

In February 2015, the Company completed a public offering of common stock in which the Company sold approximately 8.0 million shares of its common stock at an offering price of \$36.00 per share. The net proceeds generated from this transaction, after underwriting discounts and commissions and offering costs, were approximately \$270.7 million.

In February 2014, the Company completed a public offering of common stock in which the Company sold 8.0 million shares of its common stock at an offering price of \$17.75 per share. The net proceeds generated from this transaction, after underwriting discounts and commissions and offering costs, were approximately \$133.2 million.

NOTE 10. INCOME TAXES

Under the FASB's accounting guidance related to uncertain tax positions, among other things, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will

not be recognized if it has less than a 50% likelihood of being sustained. Additionally, the guidance provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The Company's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had no accrual for interest or penalties on the Company's consolidated balance sheets at December 31, 2016 or December 31, 2015, and has not recognized interest and/or penalties in the statement of comprehensive loss for the year ended December 31, 2016.

The Company is subject to taxation in the United States and various state jurisdictions. The Company's tax years for 1998 (federal) and 2002 (California) and forward are subject to examination by the United States and California tax authorities due to the carry forward of unutilized net operating losses and R&D credits.

At December 31, 2016, the Company had deferred tax assets of \$463.5 million. Due to uncertainties surrounding the Company's ability to generate future taxable income to realize these assets, a full valuation has been established to offset the net deferred tax asset. Additionally, the future utilization of the Company's net operating loss and R&D credit carry forwards to offset future taxable income may be subject to an annual limitation, pursuant to Internal Revenue Code Sections 382 and 383, as a result of ownership changes that could occur in the future. The Company has determined that no ownership changes have occurred through December 31, 2016.

At December 31, 2016, the Company had Federal and California income tax net operating loss carry forwards of approximately \$821.4 million and \$450.6 million, respectively. The Federal tax loss carry forwards will begin to expire in 2021, unless previously utilized.

The California net operating loss carry forwards will expire as follows (in thousands):

<u>Year</u>	<u>Amount</u>
2017	\$ 51,900
2018	\$140,600
2028 and beyond	\$258,100

In addition, the Company has Federal and California R&D tax credit carry forwards of \$42.9 million and \$30.0 million, respectively. The Federal R&D tax credit carry forwards begin expiring in 2018 and will continue to expire unless utilized. The California R&D tax credit carryforwards carry forward indefinitely. The Company also has Federal Alternative Minimum Tax credit carryforwards of approximately \$200,000, which will carry forward indefinitely.

Significant components of the Company's deferred tax assets as of December 31, 2016 and 2015 are listed below. A valuation allowance of \$463.5 million and \$382.4 million at December 31, 2016 and 2015, respectively, has been recognized to offset the deferred tax assets as realization of such assets is uncertain. Amounts are shown as of December 31 as of each respective year (in thousands):

	<u>2016</u>	<u>2015</u>
Deferred tax assets:		
Net operating losses	\$ 309,100	\$ 257,900
Research and development credits	38,800	33,500
Capitalized research and development	80,200	58,900
Share-based compensation expense	17,400	10,900
Deferred revenue	4,300	4,300
Deferred gain on sales leaseback	3,800	5,000
Intangibles	4,800	6,900
Cease-use expense	300	700
Fixed assets	400	400
Other	4,400	3,900
Total deferred tax assets	463,500	382,400
Valuation allowance	<u>(463,500)</u>	<u>(382,400)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The provision for income taxes on earnings subject to income taxes differs from the statutory Federal rate at December 31, 2016, 2015 and 2014, due to the following (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal income taxes at 35%	\$(49,383)	\$(31,126)	\$(21,190)
State income tax, net of Federal benefit	2	2	(3,410)
Tax effect on non-deductible expenses	(321)	172	10
Share-based compensation expense	(5,077)	201	91
Change in tax rate	—	10,773	—
Expired tax attributes	6,708	5,594	315
Research credits	(6,511)	(6,638)	(1,882)
Change in valuation allowance	53,414	15,029	25,366
Uncertain tax positions	957	5,940	621
Other	211	53	79
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Balance as of the beginning of the year	\$33,074	\$23,854	\$23,131
Increases related to prior year tax positions	260	6,636	47
Increases related to current year tax positions	2,211	2,584	676
Expiration of the statute of limitations for the assessment of taxes	(1,433)	—	—
Balance as of the end of the year	<u>\$34,112</u>	<u>\$33,074</u>	<u>\$23,854</u>

The Company, under authoritative guidance, excluded those deferred tax assets that are not more likely than not to be sustained under the technical merits of the tax position. These unrecognized tax benefits totaled \$260,000 and \$2.2 million for prior year tax positions and current year tax positions, respectively, as reflected in the tabular rollforward above.

As of December 31, 2016, the Company had \$27.4 million of unrecognized tax benefits that, if recognized and realized, would affect the effective tax rate.

In the next twelve months, the Company does not expect a significant change in their unrecognized tax benefits.

NOTE 11. RETIREMENT PLAN

The Company has a 401(k) defined contribution savings plan (401(k) Plan). The 401(k) Plan is for the benefit of all qualifying employees and permits voluntary contributions by employees up to 60% of base salary limited by the IRS-imposed maximum. Employer contributions were \$0.6 million, \$0.4 million and \$0.3 million for the years ended December 31, 2016, 2015 and 2014, respectively.

NOTE 12. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

The following is a summary of the quarterly results of the Company for the years ended December 31, 2016 and 2015 (*unaudited, in thousands, except for per share data*):

	Year Ended December 31,				Year Ended December 31
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
2016:					
Revenues	\$ 15,000	\$ —	\$ —	\$ —	\$ 15,000
Operating expenses	35,857	41,828	38,436	46,251	162,372
Net loss	(19,264)	(40,280)	(36,887)	(44,659)	(141,090)
Net loss per share:					
Basic and Diluted	\$ (0.22)	\$ (0.46)	\$ (0.43)	\$ (0.51)	\$ (1.63)
Shares used in the calculation of net loss per share:					
Basic and Diluted	86,497	86,694	86,784	86,874	86,713
2015:					
Revenues	\$ 19,769	\$ —	\$ —	\$ —	\$ 19,769
Operating expenses	22,057	25,322	35,844	30,748	113,971
Net loss	(1,192)	(23,987)	(34,435)	(29,315)	(88,929)
Net loss per share:					
Basic and Diluted	\$ (0.01)	\$ (0.28)	\$ (0.40)	\$ (0.34)	\$ (1.05)
Shares used in the calculation of net loss per share:					
Basic and Diluted	80,349	85,518	85,856	86,184	84,496

NOTE 13. SUBSEQUENT EVENTS

On February 9, 2017, the Company entered into an exclusive license agreement with BIAL for the development and commercialization of opicapone for the treatment of human diseases and conditions, including Parkinson's disease, in the United States and Canada. Under the terms of the agreement, the Company is responsible for the management and cost of all opicapone development and commercialization activities in the United States and Canada.

Under the terms of the agreement, the Company will pay BIAL an upfront license fee of \$30 million, and may also be required to pay up to an additional \$115 million in milestone payments associated with the regulatory approval and net sales of products containing opicapone. Upon commercialization, the Company has agreed to determine certain annual sales forecasts. In the event that the Company fails to meet the minimum sales requirements for a particular year, the Company will be required to pay BIAL an amount corresponding to the difference between the actual net sales and the minimum sales requirements for such year, and if the Company fails to meet the minimum sales requirements for any two years, BIAL may terminate the agreement.

The agreement, unless terminated earlier, will continue on a licensed product by licensed product and country by country basis until a generic product in respect of such licensed product under the agreement is sold in a country and sales of such generic product are greater than a specified percentage of total sales of such licensed product in such country. Upon the Company's written request prior to the estimated expiration of the term in respect of a licensed product, the parties shall negotiate a good faith continuation of BIAL's supply of such licensed product after the term. After the term, and if BIAL is not supplying a certain licensed product, the Company shall pay BIAL a trademark royalty based on the net sales of such licensed product. Either party may terminate the agreement earlier if the other party materially breaches the agreement and does not cure the breach within a specified notice period, or upon the other party's insolvency. BIAL may terminate the agreement if the Company fails to use commercially reasonable efforts or fails to file an NDA for a licensed product by a specified date or under certain circumstances involving a change of control of the Company. In certain circumstances where BIAL elects to terminate the agreement in connection with the Company's change of control, BIAL shall pay the Company a termination fee. The Company may terminate the agreement at any time for any reason upon six months written notice to BIAL if prior to the first NDA approval in the United States, and upon nine months written notice to BIAL if such notice is given after the first NDA approval in the United States. If the Company's termination request occurs prior to the first NDA approval in the United States, the Company will have to pay BIAL a termination fee except under certain conditions specified in the agreement.

ITEM 9. *CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE*

Not applicable.

ITEM 9A. *CONTROLS AND PROCEDURES*

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the timelines specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the year covered by this report. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Internal control over financial reporting refers to the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

- (1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- (2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and
- (3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the company.

Management has used the framework set forth in the report entitled Internal Control-Integrated Framework (2013 framework) published by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), known as COSO, to evaluate the effectiveness of our internal control over financial reporting. Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2016. Ernst & Young, LLP, our independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting as of December 31, 2016, which is included herein.

There has been no change in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
Neurocrine Biosciences, Inc.

We have audited Neurocrine Biosciences, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Neurocrine Biosciences, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Neurocrine Biosciences, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Neurocrine Biosciences, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2016 of Neurocrine Biosciences, Inc. and our report dated February 14, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
February 14, 2017

ITEM 9B. *OTHER INFORMATION*

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

Information required by this item will be contained in our Definitive Proxy Statement for our 2017 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A with the Securities and Exchange Commission within 120 days of December 31, 2016. Such information is incorporated herein by reference.

We have adopted a code of ethics that applies to our Chief Executive Officer, Chief Financial Officer, and to all of our other officers, directors, employees and agents. The code of ethics is available at the Corporate Governance section of the Investors page on our website at www.neurocrine.com. We intend to disclose future amendments to, or waivers from, certain provisions of our code of ethics on the above website within four business days following the date of such amendment or waiver.

ITEM 11. *EXECUTIVE COMPENSATION*

Information required by this item will be contained in our Definitive Proxy Statement for our 2017 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A with the Securities and Exchange Commission within 120 days of December 31, 2016. Such information is incorporated herein by reference.

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Information required by this item will be contained in our Definitive Proxy Statement for our 2017 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A with the Securities and Exchange Commission within 120 days of December 31, 2016. Such information is incorporated herein by reference.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE*

Information required by this item will be contained in our Definitive Proxy Statement for our 2017 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A with the Securities and Exchange Commission within 120 days of December 31, 2016. Such information is incorporated herein by reference.

ITEM 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES*

Information required by this item will be contained in our Definitive Proxy Statement for our 2017 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A with the Securities and Exchange Commission within 120 days of December 31, 2016. Such information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report.

1. List of Financial Statements. The following are included in Item 8 of this report:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2016 and 2015

Consolidated Statements of Comprehensive Loss for the years ended December 31, 2016, 2015 and 2014

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015 and 2014

Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014

Notes to the Consolidated Financial Statements (includes unaudited Selected Quarterly Financial Data)

2. List of all Financial Statement schedules. All schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or notes thereto.

3. List of Exhibits required by Item 601 of Regulation S-K. See part (b) below.

(b) Exhibits. The following exhibits are filed as part of, or incorporated by reference into, this report:

<u>Exhibit Number</u>	<u>Description</u>
3.1	Certificate of Incorporation(11)
3.2	Certificate of Amendment to Certificate of Incorporation(11)
3.3	Bylaws, as amended(11)
3.4	Certificate of Amendment of Bylaws (16)
4.1	Form of Common Stock Certificate(1)
10.1**	Neurocrine Biosciences, Inc. 2003 Incentive Stock Plan, as amended and form of stock option agreement and restricted stock unit agreement.(7)
10.2**	Form of Indemnity Agreement entered into between the Company and its officers and directors.(5)
10.3**	Employment Agreement dated May 26, 2015 between the Company and Eric Benevich.
10.4	Amended and Restated Lease dated November 1, 2011 between the Company and Kilroy Realty, L.P.(8)
10.5	Letter of Credit dated December 3, 2007, issued by Wells Fargo Bank, N.A. for the benefit of Kilroy Realty, L.P., as amended on November 20, 2014.(13)
10.6**	Amended and Restated Employment Agreement effective August 1, 2007 between the Company and Kevin C. Gorman, Ph.D.(3)
10.7	License agreement dated August 27, 1999 between the Company and the Mount Sinai School of Medicine of the City University of New York.(9)
10.8**	Amended and Restated Employment Agreement effective August 1, 2007 between the Company and Timothy P. Coughlin.(3)
10.9**	Amended and Restated Employment Agreement effective August 6, 2007 between the Company and Christopher F. O'Brien M.D.(6)

<u>Exhibit Number</u>	<u>Description</u>
10.10**	Amended and Restated Employment Agreement effective August 23, 2007 between the Company and Dimitri E. Grigoriadis, Ph.D.(6)
10.11**	Amended and Restated Employment Agreement effective August 14, 2007 between the Company and Haig Bozigian, Ph.D.(6)
10.12**	Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan, as amended (17)
10.13**	Form of Stock Option Grant Notice and Option Agreement for use under the Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan, and Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement for use under the Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan.(12)
10.14*	Collaboration Agreement dated June 15, 2010, by and between Abbott International Luxembourg S.a.r.l. and the Company as amended on August 31, 2011. (4)
10.15**	Form of Amendment to Employment Agreement for executive officers.(10)
10.16**	Neurocrine Biosciences, Inc. Inducement Plan, as amended, Form of Stock Option Grant Notice and Option Agreement for use thereunder.(2)
10.17	Collaboration and License Agreement dated March 31, 2015 between Mitsubishi Tanabe Pharma Corporation and the Company.(14)
10.18	First Amendment to Collaboration and License Agreement Dated August 31, 2011 between the Company and Abbott International Luxemburg S.a.r.l.(15)
10.19**	Employment Agreement dated January 4, 2017 between the Company and David-Alexander Gros.
10.20**	Transition Agreement dated December 20, 2016 between the Company and Timothy P. Coughlin.
21.1	Subsidiaries of the Company
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
32***	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

(1) Incorporated by reference to the Company's Registration Statement on Form S-1 (Registration No. 333-03172)

(2) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on July 29, 2015

(3) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on August 3, 2007

- (4) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on July 29, 2010
- (5) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 1, 2009
- (6) Incorporated by reference to the Company's Annual Report on Form 10-K filed on February 11, 2008
- (7) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on July 30, 2009
- (8) Incorporated by reference to the Company's Current Report on Form 8-K filed on January 18, 2012
- (9) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on July 26, 2013
- (10) Incorporated by reference to the Company's Annual Report on Form 10-K filed on February 10, 2011
- (11) Incorporated by reference to Exhibits 3.1 and 3.2 to the Company's Current Report on Form 8-K filed May 24, 2016, Exhibit 3.1 to the Company's Current Report on Form 8-K filed October 2, 2015, and Exhibits 3.1, 3.2 and 3.3 to the Company's Annual Report on Form 10-K filed on February 8, 2013
- (12) Incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2015
- (13) Incorporated by reference to the Company's Annual Report on Form 10-K filed on February 9, 2015
- (14) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on April 30, 2015
- (15) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on October 31, 2011
- (16) Incorporated by reference to the Company's Current Report on Form 8-K filed on September 23, 2016
- (17) Incorporated by reference to the Company's Current Report on Form 8-K filed on May 24, 2016

* Confidential treatment has been granted with respect to certain portions of the exhibit.

** Management contract or compensatory plan or arrangement.

*** These certifications are being furnished solely to accompany this annual report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of Neurocrine Biosciences, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Except as specifically noted above, the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K have a Commission File Number of 000-22705.

(c) Financial Statement Schedules. See Item 15(a)(2) above.

SIGNATURES

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

NEUROCRINE BIOSCIENCES, INC.

A Delaware Corporation

By: /s/ Kevin C. Gorman

Kevin C. Gorman
Chief Executive Officer

Date: February 14, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Kevin C. Gorman</u> Kevin C. Gorman	Chief Executive Officer and Director (Principal Executive Officer)	February 14, 2017
<u>/s/ Timothy P. Coughlin</u> Timothy P. Coughlin	Chief Financial Officer (Principal Financial and Accounting Officer)	February 14, 2017
<u>/s/ William H. Rastetter</u> William H. Rastetter	Chairman of the Board of Directors	February 14, 2017
<u>/s/ Gary A. Lyons</u> Gary A. Lyons	Director	February 14, 2017
<u>/s/ Joseph A. Mollica</u> Joseph A. Mollica	Director	February 14, 2017
<u>/s/ George J. Morrow</u> George J. Morrow	Director	February 14, 2017
<u>/s/ Corinne H. Nevinny</u> Corinne H. Nevinny	Director	February 14, 2017
<u>/s/ Richard F. Pops</u> Richard F. Pops	Director	February 14, 2017
<u>/s/ Alfred W. Sandrock, Jr.</u> Alfred W. Sandrock, Jr.	Director	February 14, 2017
<u>/s/ Stephen A. Sherwin</u> Stephen A. Sherwin	Director	February 14, 2017

[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]

Neurocrine Biosciences Corporate Information

CORPORATE MANAGEMENT

Kevin C. Gorman, Ph.D.
Chief Executive Officer

Christopher F. O'Brien, M.D.
Chief Medical Officer

Darin M. Lippoldt, J.D.
Chief Legal Officer

Eric Benevich
Chief Commercial Officer

David-Alexandre Gros, M.D.
President, Chief Operating Officer

Dimitri E. Grigoriadis, Ph.D.
Chief Research Officer

Haig Bozigian, Ph.D.
Chief Development Officer

Kyle W. Gano, Ph.D.
Chief Business Development Officer

Malcolm C. Lloyd-Smith
Chief Regulatory Officer

BOARD OF DIRECTORS

William H. Rastetter, Ph.D.
*Chairman of the Board,
Neurocrine Biosciences, Inc.,
Cerulean Pharma, Inc.
and Fate Therapeutics*

Kevin C. Gorman, Ph.D.
*Chief Executive Officer,
Neurocrine Biosciences, Inc.*

Gary A. Lyons
*Former President and Chief Executive
Officer, Neurocrine Biosciences, Inc.*

Corinne H. Nevinny
*Former Corporate Vice President,
Cardiac Surgery Systems and Vascular
Edwards Life Sciences Corporation*

George J. Morrow
*Former Executive Vice President, Global
Commercial Operations at Amgen Inc.*

Joseph A. Mollica, Ph.D.
*Former Chairman of the Board,
Pharmacopeia Drug Discovery, Inc.*

Richard F. Pops
*Chairman of the Board
and Chief Executive Officer
Alkermes, Inc.*

Alfred W. Sandrock, Jr. M.D., Ph.D.
*Executive Vice President, and
Chief Medical Officer, Biogen Inc.*

Stephen A. Sherwin, M.D.
*Former Chairman of the Board
and Chief Executive Officer,
Cell Genesys, Inc.*

STOCKHOLDER INFORMATION

Transfer Agent
American Stock Transfer

Auditors
Ernst & Young LLP



12780 EL CAMINO REAL, SAN DIEGO, CA 92130 (858) 617-7600

WWW.NEUROCRINE.COM